

small air forces observer

vol. 16 no. 4 (64)
October 1992

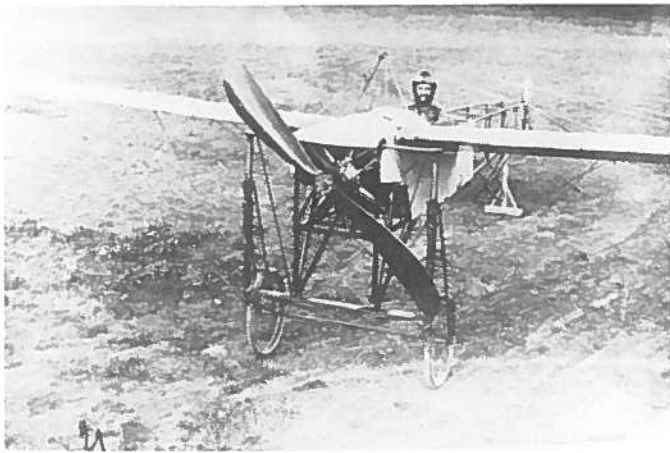
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**SQUADRONS OF THE ISRAELI AIR FORCE 1948-1949
AIRCRAFT OF THE CHACO WAR: PART II BOLIVIA
AIRCRAFT OF THE BALKAN WARS 1912-1913
ECUADORIAN STRIKEMASTER
CAMBODIAN & VIETNAM MILs
CAMBODIAN AIRCRAFT
CANADIAN HADRIAN**

vol. 16 no. 4 (64)

October 1992



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SMALL AIR FORCES OBSERVER

The Newsletter of the Small Air Forces Clearing House

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SAFO EDITORIAL POLICY: The purpose of the SAFCH is to "promote interest in the history and modeling of the aircraft of the smaller countries". In support of this goal, the SAFCH encourages international cooperation in researching aviation history, both military and civil, from all periods of time, and for all the smaller countries. In return for this support, members are asked to submit occasional progress reports for publication in the SAFO. While the final results should appear in the most prestigious publication possible, it is requested that the SAFCH be mentioned (with address) in the article and that SAFO be afforded the opportunity of reprinting the material. Article published in SAFO can be reprinted provided permission of the author is obtained and the SAFO is identified in the reprint.

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James V. Sanders, Account #03105350.

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INFORMATION FOR AUTHORS: Manuscripts may be submitted in any form; authors whose first language is not English may submit a rough translation of the text and the editorial office will put it into good English. Authors using a computer should send the manuscript on disc. Photo should be black and white prints although color prints can be used. If you want any photos returned, please mark "Return" on the back. All art work must be ready for printing. The layout should be such that when a page is reduced (if necessary) the drawing should fit into the 7.5 inch by 10 inch working area of the final page. Art work that does not fit this requirement will have to be cut and pasted to fit; no problem, but things might not look exactly as you want them to look. All work for the SAFO is voluntary and no payment can be made for published material.

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COVER COMMENTS: John MacGregor (SAFCH #766) sent the photo on the cover asking for identification. It's carrying Bulgarian registration, but John thinks it might be of French origin. Can anybody identify this bird?

PHOTOS ON INSIDE OF FRONT COVER (See article on page 109)

- Bleriot monoplane at Mustapha Pasha, 1912.
 - Bleriot monoplane, the pilot is LT Simeon Petrov.
 - Same as (b).
 - Henri Farman bomber showing Bulgarian markings.
 - Voisin showing Bulgarian markings. The pilot (on the horse) is the Swiss volunteer LT Burie.
 - Giovanni Sabelli with Major Vladimir Zlatarev of the Bulgarian Army, about to take off for a flight over Adrianople, November 1912.
 - Poor photo but it shows LTs Radoul Milkov and Prodan Tarakchiev.
 - Voisin. Pilot is LT Nikola Minkov.
- See also photo of Greek Farman in 'Flight' January 1913.
(All photos via author)

PHOTOS ON BACK COVER: (See article on page 113)

- Vickers Scout (Type 143): Bolivian Army Aviation, La Paz 1930.
 - Curtiss-Wright Osprey: Bolivian Army Aviation.
 - Fokker C-Vc: Bolivian Army Aviation, La Paz, 1928.
 - Breguet XIX-A2: Bolivian Army Aviation, "Batallon Colorados", La Paz, 1929.
 - Vickers Vespa Mk.III: Bolivian Army Aviation, "5", La Paz, 1930.
 - Curtiss-Wright Cyclone-Falcon: Bolivian Army Aviation, over the Andes, 1934.
 - Caudron C.97: Bolivian Army Aviation, "Chorolque", La Paz, 1926.
 - Junkers F-13: Bolivian Army Aviation, "Mamore" & "Charcas", Cochabamba, 1928.
 - Junkers W.34: Bolivian Army Aviation, "Tunari", La Paz, 1930.
 - Ford 5-AT-D: Bolivian Army Aviation, "Cruz del Sur", Villamontes, 1932.
 - Junkers Ju.53/3M: Bolivian Army Aviation, Villamontes, 1935. (Photo Col. Paskor via author)
 - Junkers K.43: Bolivian Army Aviation, Villamontes, 1934.
- (All photos Ramiro Molina, except as noted, via the author)

SPONSORSHIP OFFER: "On behalf of the Heraldry of the Air Museum, I can offer to sponsor the SAFO subscription for a few SAFCH members (in any country) if they are willing to help the Museum. The Museum needs both civil and military badges and patches, as well as aircraft color schemes in book, magazines, or any other form. In addition

to a SAFO subscription, I can send kits and model accessories. However, since I am not a modeler, a want list would be necessary. I can also send non-aviation items - anything as long as it's legal.

"For many years, the Museum has had similar, quite enjoyable, arrangements with friends in Australia, Czechoslovakia, France, Italy,

Poland, Spain, Belgium, and Turkey. However, we still need partners in Eastern Europe, Asia, Africa, and Latin America. I can handle as many as ten SAFO subscriptions." Peter Bruce Walton (SAFCH #455), c/o Heraldry of the Air Museum, 254 Hoyt St., Brooklyn, NY 11217.

AUSTRALIA

AUSTRALIAN PLASTIC MODELLER'S ASSOCIATION (APMA, PO Box 51, Strathfield, NSW 2135; 4 issues sea mail A\$27; air mail A\$30). Autumn 92 (28 pages) "Spitfire PR.XIII" 1/2-page with side-view drawing. "Turkish Hurricane" 1/2-page with side-view drawing. "Modelling the Yak-9" 3 pages including 1/72-scale drawings and 3 side-view drawings (mock Hurricane, USSR, & North Korean). "Modelling the Australian S-70B-2 Seahawk: Part 1" 9 pages including 6 photos and lots of drawings of details. "Another Belgian Dakota" 1/2 page with side-view drawing. "Westland's Whirlwinds" 7 pages including one photo, 2 pages of scale drawings, and 3 side-view drawings (all UK). "Iberian Air War Corrections" one page with drawing of Spanish Republican Dragon Rapide with correct armament.

AUSTRIA

OFH NACHRICHTEN (Oesterreichische Flugzug Historiker, Pfenniggeldgasse 18/2/14, A-1160, Wien). 2/92 (36 pages) "Hptm. Erich Hondt" 11 pages including 9 photos and 3 side-view drawings (Bf-109 & FW-190). "Vickers Viking der Aero-Transport" 7 pages including 7 photos and service history. "Fiat CR-32 'Chirri' Markierungen" 5 pages describing command markings of Austrian CR-32 including 2 photos, 3-view drawing, and 7 side-view drawings. Photos: Museum Berg D.I, Cessna 150 'OE-ALZ', & Polish Goliath in Austria.

CANADA

RANDOM THOUGHTS (IPMS Canada, Box 626, Stn. B, Ottawa, Ontario K1P 5R7; 6 issues for US \$20.00 in US \$22.00 elsewhere). 22/3 (24 pages) "A Modeller's Guide to Trans-Provincial Airlines and their Fleet" 9 pages including 15 photos. "Experimental Group of the German 11th Fighter Wing" 2 pages including side-view drawing of FW-190A-8 in standard Luftwaffe markings with small Hungarian flag on tail. "Cast-iron your own Parts" 4 pages of practical advice.

ENGLAND

IPMS MAGAZINE (Ernie Lee, 51 Ball Road, Hillsborough, Sheffield, South Yorkshire S6 4LZ, 6 issues for £18.00 (approximately \$36.00. US subscription agent: Wise Owl Publications, 4314 West 238th St., Torrance, CA 90505; since exchange fluctuates write Joe for current rates). 3/92 (36 pages) "Nordun's Norsemen" one page with 4 side-view drawings (one RAAF). "RNZAF Avenger" 1/2 page with side-view drawing. "MiG-29" 2 pages with drawings of East & West German aircraft. "MC-130E - Special Operations Hercules" 10 pages on modeling this variant including 7 pages of 1/72-scale drawings. "MiG Manifesto" 7 pages including 14 side-view drawings of MiG-17's (Albania, Angola, Madagascar, Nigeria, Indonesia, North Vietnam, Egypt (3), Cambodia, Syria (2), & East Germany). "Potez 54 Series in Spain" 2 pages with 3 side-view drawings and drawing for converting the 540 to a 542. "The Last Sea (Spit) Fire" 1/2 page with side-view drawings of RN Spitfire FR47. 4/92 (24 pages) "Going over the Top" 2 pages on detailing a 1/72 Tornado (total cost £ 85.70). "Armee de l'Air de l'Armistice" 3 pages including 6 side-view drawings [Hawk 75, D.520 (4), & MS.406]. "Detailing the Frog Bf 110G" 2 pages.

"Modelling the Yak-15/Yak-21" 2 pages including 7 side-view drawings (all Soviet).

PLASTIC KIT CONSTRUCTOR (PAMAG (Publications) Ltd., Unit 308, J.C. Albyn Complex, Burton Rd., Sheffield S3 8BZ; 4 issues £ 17.00 approximately \$34.00. In USA: J.J. Daileida, 4314 West 238th St., Torrance, CA 90505; since exchange fluctuates write Joe for current rates). #31 (28 pages) "MiG-23ML Flogger G in Close Up" 3 pages with 10 photos of Czech aircraft. "Scratch Planning RE-7" 4 pages on building a RE-7 in 1/72 scale including scale drawings and 7 photos.

FINLAND

MALLARI (IPMS Finland, PL 798, 00101 Helsinki 10; 6 issues \$20.00, no check accepted due to the high redemption costs). 3/92 (16 pages) "Lockheed U-2A/G" 8 pages including 8 side-view drawings. "FAF Islander" 1/2 page side-view drawing. "FAF Saab 17" 2 pages with 4 photos.

GERMANY

MITTEILUNGEN (IPMS Germany, Bergengruenstrass 5-7, D-1000 Berlin 38; 12 issues DM 60.00 Europe, DM 65.00 USA, DM 70.00 Japan, DM 75.00 Australia). 4/92 (32 pages) Photo: Soviet Munzel MR-1 (DH-4 on floats?). "Erster Tag der offenen Tur auf dem Flugplatz Finow" 7 pages with 19 photos of Soviet aircraft. "Eine weiter Messerschmitt Bf 109 e von Adolf Galland" 2 pages including one photo and one side-view drawing. "Canadian National Aviation Museum" 4 pages including 5 photos. 5/92 (32 pages) Nothing of small-air-force interest.

ITALY

IL NOTIZIARIO (IPMS Italy, CP 182, 41100 Modena Ferrovia; 4 issues 30,000 Italian Lira in Europe or US\$35.00 overseas). 1/92 (32 pages) All articles about creepy crawlers.

JP-4 (JP-4, CP 1550, 50100 Firenze; L 27.000 Europe, L 30.000 elsewhere).

6/92 (98 pages) Color photos: Croatia Airlines Boeing 737 'RC-TCA' and Iraqi Mi-17 '5859'. "Dal Mi-8/17 al Mi-171" 6 pages including 8 color photos and cutaway drawing. "Ultima Missione per 'Fertile Mirtle'" 4 pages on USAAF B-17 which crash landed on Italian air base including 5 photos. 7/92 (98 pages) Color photo: Norwegian C-130 in UN markings. "1st Gruppo Caccia: The Unknown Surrender" 14 pages including 11 photos and color side-view drawing of Italian Bf-109G. "Paraguay: An Air Force made of Trainers" 6 pages including 8 color photos (Xavante, Esquitos, Tucano, AT-33, PBV-5, CASA 212, & C-47).

POLAND

AERO TECHNIKA LOTNICZA (Bartycka 20, 00-716 Warszawa 36. 12 issues US \$32.00.) 5/92 (44 pages) "Super Etendard" 15 pages including 7 photos, 1/72-scale 3-view drawings of Etendard IVP & IVM and 2 pages of 1/72-scale drawings of Super Etendard, and 2 pages of drawings of Aeronaval Super Etendard. "Boeing 737" 8 pages including 7 b&w photos, 8 color photos (including Lithuanian Airlines 'HA-LEH', scale drawings of variants, and table of users. Color photos: Polish

An-26 and Mi-24 with close-ups of colorful unit insignia. Photos: RWD-2 'SP-ACE' & 'SP-ADH'. 6/92 (44 pages) "Messerschmitt Bf 110C/H" 20 pages including 5 b&w photos, 5 color photos, 2 color side-view drawings, 18 side-view drawings showing variants, 2 pages of sketches of armament, 2 pages of 1/72-scale drawings, and 10 side-view tone drawings. "Boeing 737" 7 pages including 6 b&w and 2 color photos, one pages of sketches of details, and a 2-page 1/144-scale drawing. 7/92 (44 pages) "A-6 Intruder" 18 pages including 18 b&w photos, 3 color photos, 5 pages of 1/72-scale drawings, and 6 side-view drawings. "Baltycki Rajd" 2 pages including 6 photos of Polish AF aircraft (Breguet 19 & Spad 61) on 1926 flight to Lida, Riga, and Helsinki. Color photo: Ukraine MiG-29 in decorative blue & gold scheme.

USA

SKYWAYS (15 Crescent Rd., Poughkeepsie, NY 12601; 4 issues \$25.00 USA or \$30.00 overseas.). #23 (84 pages) "Command-Aire 'Little Rocket'" 7 pages including 5 photos. "All-American Flying Derby" 5 pages with 16 photos. "Monospar ST.4" 6 pages including 7 photos and 1/72-scale drawings. "Curtiss-Wright Junior Replica" 4 pages including 8 photos. "Boeing 80" 7 pages including 11 photos. "TB-1: The First Soviet Heavy Bomber" 7 pages including 10 photos and 2 pages of scale drawings. "Junkers Luftverkehr: Conclusion" 5 pages including 2 photos. "Dornier Super-Wal" 5 pages including 9 photos and 2 pages of scale drawings. "The Lost Flight of l'Oiseau Blanc" 6 pages including one map. "Seversky BT-8" 2 pages including 2 photos. "More on those Payens" one page with one photo and three 3-view drawings.

PRI-FLY (IPMS Washington DC, c/o Carol Fleckenstein, 13816 Choptank Ct., Centreville, VA 22020; 4 issues \$8.00 for US, \$9.00 all others). 81 (16 pages) "FW-200 Condor" one-page kit review. "Letov S-231" one-page kit review. "The First Fortresses" 2 pages on converting the Mini-craft B-17B into a Y1B-17. "The Open Cockpit" one page with drawings of Martinsyde Buzzard and Loening OA-1A cockpits.

AIR INTERNATIONAL, Key Publishing Ltd., PO Box 100, Stamford, Linc PE9 1XQ, England. Vol. 41 #6, December 1991. Color photos: Argentine Sabre 75A. B&W photos: Kuwaiti F/A-18D Hornet. Articles: "Pakistan's Army Aviation" (5 pages). Color photos include Puma, Mi-8, Lama, Bell 206B Jet Ranger, Cessna O-1, MFI-17 Mushshak, and Bell AH-1S Cobra. B&W photos show Bell AH-1S Cobra, Alouette III, Bell UH-1H, and Bell OH-1. Vol. 42 #1, January 1992. Color photos: Spanish Canadair CL-215TUD; Polish Sokol helicopter; and color profile of Australian Navy Fairey Gannet AS Mk4. Articles: "Mountain Hawks" (2 pages). Color photos of Swiss Hawk Mk66, Hunter, F-5E, and Vampire T55. "New Teeth for the Tiger" (8 pages). Color photos of Dutch F-5A, Canadian CF-5, Norwegian F-5B, Greek F-5A, South Korean F-5E, and Spanish SF-5. "Star of the Storm" (7 pages). One color photo of Saudi Arabian F-15. "Havel's Helicopters" (2 pages). Color photos of two Czech Government Mi-8, Czech Police Mi-2, and a Bo-1055. Vol. 42 #2, February 1992. B&W photos: South African Aerotech Trainers; Italian F-104 in low-viz markings; and Czech MiG-21MA. Articles:

"Protector of the Plate" (6 pages). Uruguayan Navy Air Force. Color photos of Grumman S2A-G Tracker, Beech T-34 Turbo Mentor, Beech Super King Air 200T, T-28 Fennec, Beech T-34 A/B Mentors, SNJ-5 Texan, and Sikorsky CH-34J. B&W photos include Grumman S-2A Tracker, CANT 18 seaplane, Vought OS2U-3 Kingfisher, Grumman J4F-2 Widgeon, Grumman Avenger, Grumman Hellcat, and Martin Mariner.

Vol. 42 #4, April 1992. Color photos: Indonesian Airtech CN 235M; Chinese/Pakistan K-8 Karakorum Trainer; Pakistan Saab MFI-9 Mushshak. B&W photos: Yugoslav MiG-21 that defected to Austria. Articles: "Airmobility: Italy's Army Aviation Today" (7 pages). Color photos of Agusta-Bell AB-412, AB-205, CH-47C Chinook, SAIA Marchetti SM-1019, A-129 Mangusta, and Dornier 228. B&W photos include AB-412, 109CM, AB-206C-1, Cessna O-1E, and AB-205 in United Nations Monitor Mission markings in Yugoslavia. "Manifestly Multitrole: Sikorsky's H-19 Series Detailed" (7 pages). Color photos of French and Turkish S-55.

Vol. 42 #5, May 1992. Color photos: Turkish Robinson R-22 Beta helicopter; color profiles of Czech and Iraqi Su-25K Frogfoot (or is it Frog-foot?). B&W photos: Portuguese Super Lynx Mk95; Chilean Museum aircraft including Vought OS2U Kingfisher, Hunter FGA9, Sikorsky S-55, Beech T-34 Mentor, and Vampire T55 in Chilean AF markings. Articles: "Not all Black and White for the Winged Kiwis" (9 pages). Color photos of A-4K and TA-4K Skyraiders, Strikemaster Mk88, Lockheed Orion, Bell 47-G, Wasp HAS1, MB-339C, C-130H Hercules, UH-1H Iroquois, CT-43 Airtrainer, Boeing 727-100C, and Andover CMk-1. One of these latter aircraft is shown in United Nations paint for duties in Iran. B&W photos include Fokker F-27, Sunderland Mk5, Devon, Corsair, Kittyhawk, Dauntless, Ventura, Oxford, and Vincent.

Vol. 42 #6, June 1992. Color photos: Canadair Tutor in Golden Centennaires markings. B&W photos: Dutch Fokker F-27-500M Troopship in United Nations markings for service in Cambodia; Guatemalan F-27 Troopship; Armed Forces of Malta O-1E in the country's new markings. Articles: "For Sale: One Careful Owner" (1 page). Color photos of Polish aircraft for sale (Lim-6, TS-11 Iskra, and Su-7UM Sparkas). "Rockwell's Coin Machine" (9 pages). Color photos of Luftwaffe OV-10B and Thai OV-10C Broncos. B&W photos include Indonesian OV-10F, Moroccan OV-10A, Luftwaffe OV-10B, and Venezuelan OV-10E Bronco.

Vol. 43 #1, July 1992. Color photos: Italian Army Augusta-Bell AB-412 and A.129 Mangusta. Articles: "Home on the Weld" Color photos include Pilatus PC-7, Airtech CN-235M, SA 365N1 Dauphin, CASA C.212, BK-117, Alouette III, and Pilatus PC-6/B2-H4 Turbo Porter of the Bophuthatswana AF.

Compiled by Don Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

AIR FORCES MONTHLY: Key Publishing Ltd., PO Box 100, Stamford, Linc PE9 1XQ, England. #45 December 1991. Color photos: Kuwaiti F/A-18D; North Korean Il-76; Patrouille de Swiss Hunter. B&W photos: Israeli Aero L-39Z; New Zealand CT-4B; Yugoslav MiG-21bis. Articles: "Austrian Alert" (3 pages). B&W photos of Saab J-35OE Draken, Saab J-105OE, Pilatus PC-6 Turbo Porter, Agusta-Bell 206 Jet Ranger, and Alouette III. "Kfir: Israeli Lion Cub" (8 pages). Color and b&w photos of Israeli and US C-1 and C-2 Kfirs. "Danish Tank Busters" (3 pages). Color and b&w photos of AS 550C2 Fennec helicopter. B&W photo of Hughes H-500.

#46 January 1992. Color photos: Malaysian PC-7 Taming Sari Team; Chilean MBB-Kawasaki BK-117. B&W photos: Czech MiG-21PFM. Articles: "Buckeye: Navy Trainer" (4 pages). B&W photos of Greek and Venezuelan aircraft. "Gulfstream in Uniform" (4 pages). Color photos of Italian and Saudi Arabian S-1159A Gulfstream, Greek Gulfstream I, Irish Gulfstream III. B&W photos of Ivory Coast Gulfstream I; Indian Gulfstream G-1159A; and Mexican Gulfstream G-159.

#47 February 1992. Color photos: Israeli F-16C Valley Sqd. B&W photos: Argentine Navy Lockheed L-188-PF Electra; Peruvian Harbin Y-12; Spanish Canadair CL-215; Singapore A-4SU Skyhawk. Articles: "Showbiz: Richmond" (3 pages). B&W photos of Australian Pilatus PC-9. Color photos of RAAF Roulettes display team Pilatus PC-9, RAAF Lockheed Orion and Caribou, and Australian Army Sikorsky S-70A-9.

#48 March 1992. Color photos: Dutch Navy Lockheed P-3C Orion; Austrian Saab J-105OE; Ghana Skyvan. B&W photos: Danish Saab F-35 Draken. Articles: "The Grey Pig" (5 pages). Color and b&w photos of RAAF F-111. "Tigers of Deci" (7 pages). Color photos of Italian F-104, b&w photos of same plus Luftwaffe Transall. "Tokol Helicopter Plant" (4 pages). B&W photos of several Mi-8 under construction and a Hungarian MiG-21bis. "Watered Goat" (3 pages). B&W of Greek HU-16 Albatross, F-16C, and Canadair CL-215. Color photo of Greek HU-16. "Netherlands Pilot Training" (4

pages). One color and one b&w photo of Dutch Pilatus PC-7 in high-vis scheme.

#49 April 1992. Color photos: Dutch Lynx; Philippine SIAI Marchetti S-211. Articles: "Sarghoda: Pakistan's Top Gun Base" (4 pages). Color photos of Pakistani Shenyang F-6 and F-16A. B&W photos of Pakistani F-7P, Mirage 5PA, F-16B, Alouette III, and F-6.

#50 May 1992. Color photos: Danish C-130H; Turkish F-4E Phantom and Robinson R 22 Beta; Chinese/Pakistan Karakorum K-8 Basic Trainer; Chilean Mirage 50 & Enaer Turbo Pillan. B&W photos: Belgian Army Islander B-02/LB and Dutch Bo-105CB B-46. "Backseat Driver" (5 pages). Several color and b&w photos of AMX fighter/trainer in Italian and Brazilian markings. "The Good Idea, the Bad Guys, and the Ugly Helicopter" (9 pages). Color photos of Polish, Iraqi, and Czech Mi-24 Hinds. B&W photos of Czechoslovak and Indian Hinds. "Bagshaw Aviation" (4 pages). B&W and color photos of Canadian CF-18 Hornet and British Jaguar flown by Dave and John Bagshaw.

#51 June 1992. Color photos: Portuguese Super Lynx Mk95; Canadian "Golden Centennaires" CT-114 Tutor; Belgian Army Agusta 109HO-3; Malaysian F-28 1000. Articles: "A Change, a Challenge, a Future" (4 pages). Aircraft of the South African AF including color photos of SAAF Atlas C4M Kudus, Harvard, and Dakota. B&W photos include Piaggio P.166S, Douglas DC-4, Alouette III, and Cheeth. "Team Work '92" (9 pages). Includes great color photos of Qatari Mirage F-1. "Operation Opera" (5 pages). Article on the Israeli attack on Iraqi nuclear reactor in 1981. One color photo of Israeli F-16 and several b&w photos of Israeli F-16A, F-16B, F-15, and E-2C Hawkeye.

#52 July 1992. Color photos: Canadian Bell Kiowa; Sri Lankan Chengdu F-7, Guizhon GAIGC FT-7, and Shenyang FT-5; Israeli HH-65A Dolphin and IAI 1124N Sea Scan; Italian Fiat G-91R in special markings. B&W photos: Papua New Guinea Casa CN 235; Swedish Fairchild Metro III; Czechoslovak Su-25 Frogfoot sharkmouth (nose only). Articles: "India". Color photos include MiG-21M, MiG-21FL, MiG-23MF, MiG-25, MiG-29A, Hunter F56, Mi-17, HJT-16 Kiran Mk2. B&W photos include MiG-29A, Mirage 2000H, MiG-21bis, MiG-27M, An-32, Il-76MD, MiG-23BN, Jaguar IS, Boeing 737-200, Do-228, Mi-26, Mi-35, TS-11 Iskra, HAL HPT Trainers, and Mi-8.

Compiled by Don Van Winkle (SAFCH #968), 9302 Kings Cross, San Antonio, TX 78250.

"The Northrop/Embraer advanced Tucano trainer demonstrator is now in the United States to participate in a joint demonstration tour for the US Air Force and Navy. The tour will include technical presentation and flight evaluations at Andrews AFB (Washington, DC) and Randolph AFB (Texas), and for the Navy at Pensacola (Florida) and Corpus Christi (Texas). Around 150 flights with Air Force and Navy pilots are planned in the 56-day demonstration tour.

"The trainer demonstrator aircraft will be accompanied by a standard Tucano and the second prototype of Embraer's 19-seat, pusher-prop, transport CBA-123 Vector, which will act as a support plane carrying engineers, technicians, equipment, and spares.

"Development of the EMB-312H was formally announced at the Paris Air Show in June 1991. First flight of the advanced Tucano trainer demonstrator took place on 9 September last year

and so far over 100 hours have been clocked in this flight test program. This aircraft was developed to demonstrate that the baseline Tucano could handle the extra power and deliver the performance necessary for US Air Force and Navy training requirements. It is fitted with a 1600 SHP turboprop engine, zero-zero ejection seats, pressure refueling system, ventral speed brakes and OBOGS (on board oxygen generating system).

"Embraer and Northrop formally teamed to compete in the US Air Force and Navy's Joint Primary Aircraft Training System (JPATS) last May. The Super Tucano, with its larger engine, ability to withstand greater 'g' forces, and its pressurized cockpit, will fly faster and operate at the higher altitudes now required in the military training system. It also will have improved emergency ejection capability and enhanced fatigue life. The turboprop's fuel efficiency and the planned improvements to the demonstrated supportability of

the baseline Tucano will reduce life cycle costs.

"Under the terms of the agreement in principle, Northrop will be prime contractor and Embraer principle subcontractor for the Air Force/Navy Super Tucano. Fabrication and subassembly of the Super Tucano will occur in Brazil. Northrop will do final assembly and delivery of the aircraft to the two services. In addition, activities are well underway on the ground-based training and logistics support components of the Embraer/Northrop JPATS proposal. According to Government estimates, the US Air Force and Navy plan to purchase between 600 to 800 aircraft in the JPATS program along with ground-training and logistic-support systems. "To date, Embraer has sold nearly 640 Tucano turboprop trainers to 14 air forces around the world. Great Britain and France are among the countries whose air forces selected the Tucano as their primary training aircraft."

"I'm looking for a color scheme for a Lithuanian Fokker D.VII. I'd also like to acquire copies of the French magazine 'Le Fana de l'Aviation' #256 and #257 (February and March 1991), and 1/72-scale kits of the following French types: Dewoitine D-371, Loire 130, Loire LN401, and Potez XXV. Vacuform or resin is OK. I'll buy or swap from my collection of unwanted kits/books. Can any French readers help?"

"Also, with all the 'new' states in Europe (Estonia, Latvia, Lithuania, Beloruss, Ukraine, Moldova, and all the other states of the former USSR, plus Croatia and Slovenia) does anyone have information on the air forces of these new countries including photos or sketches of aircraft wearing their markings? I've seen reports in the press of Azerbaijan Su-25s and Moldavian & Ukrainian MiG-29s. Anybody seen any photos?"

"I recently received the enclosed photo from a Bulgarian friend. If it's good enough to print, please do so and invite comments. I'd love to know what it is! Looks French, doesn't it?"

John MacGregor (SAFCH #766), 13 Foggyley Gardens, Dundee, Scotland DD2 3LG.

[Editor's note: John photo of 'LZ-CTT' is published elsewhere in this issue. I don't know what it is, but it doesn't look French to me - too pretty. Can anyone help?]

"I am interested in contacting fellow SAFO readers who are interested in the aviation aspects of the Korean War with the intent of possibly working together to publish a book on this subject. I am also interested in exchanging aircraft kits, accessories, books, etc. All correspondence would be greatly appreciated."

Igor Gordeljanow (SAFCH #1066), ul. Strijskaja 179 kw.68, Lvovskaja obl., g. Drogobych, 293720 Ukraina.

[Editor's note: Igor submitted a manuscript on Soviet aces in the Korea War. This article is based on published interviews with the participants. Unfortunately, the manuscript arrived too late to be included in this issue of SAFO, but it should be published next time. In addition, Igor sent information on new kits from the states that have arisen from the former USSR (see the "Kits" column). He also sent several samples of new magazines for modelers from Ukraine and Belaruss (see "Magazine" column and Sales List).

Disposal: Photos from the collection of the late Brian Flanagan via Augie Blume. (1) 92 photos taken at an Air Show at Randolph AFB, Texas, May 1953; pay postage only \$2.36 (\$3.95 non-USA) plus \$0.50 for envelope. (2) 180 photos copies from "Dietsel's Scrapbook of German Aircraft"; pay postage only \$2.90 (\$7.65 non-USA) plus \$0.50 for envelope. These photos will go to the person whose payment is received first at the SAFO editorial office.

"Does anyone out there have a copy of Saunders and Saro Aircraft since 1917, by Peter London,

Putnam, 1988? None of the libraries around here seem to have a copy. If so, could you please photocopy the section on the Saro A.17 Cutty Sark including any Appendix information there might be, such as a production list? One of these was used by the NZPAF/RNZAF, but I do not have much on the type and what I have seems to be rather mixed up as far as the exact model is concerned. I already have the Aeroplane Monthly, July 1991, article; plus the library has the earlier Putnam volume on British Flying Boats and Amphibians 1909-1952, by G.R. Duval, 1966; and his British Flying Boats - A Pictorial Survey, D. Bradford Barton Ltd., 1973. But that is about it."

Paul Adams (SAFCH #773), 81 Ponsonby Rd., Ponsonby, Auckland 1, New Zealand.

"I would like to get either originals or photo copies of the following card models. I presently pay \$5.00 including postage for photo copies of card kits (which I use as patterns to make plastic models), but I am open to offers and trades: Geli Models (Austria) GL #59 B.A. Jaguar; Kartonowy Models (Poland) Commonwealth CA-12 Boomerang; and Maty Modelarz (Poland) 58/2 Zlin-26, 58/7 RWD-9, 59/4 Ikarus, 60/5 Griffon II, 62/3 Spad 51, 62/5 Brygadyr, 63/8 Delfin, 63/11 Iskra, 64/2 Bloch 152, 64/9 UT-2, 66/1 La-11, 66/5 An-12, 67/4 RWD-6, 67/11 MiG-3, 68/3 RWD-9, & 69/5 Karas."

Jim Merrigan (SAFCH #857), 23 Maryland Ave., West Long Branch, NJ 07764.

"I have some kits and book to sell or exchange. **French resin kits (1/72):** \$20.00 Caproni Vizzola F-4, F-5, F-6Z; SAI-7, SAI-207; Nardi FN-305A, FN-305C; Reggiane Re-2005; Marcel Besson MB-411; Loire 210C1; SIPA S-12; SO-6000 Triton; SNCASO S.O.M.-1; Nord 1402 Gerfaut 1; SO 6020/26 Espadon; SO 6025 Espadon; Arsenal VB-10C1. \$18.00 Caudron Renault C-362, C-450, C-460, C-690, C-6760, CR-760. \$16.00 Bleriot Spad 61C1, 81C1, 510C1; Payen PA-22, PA-V5; French gliders Fauvel AV-36 (1/72) and Nord 2000 alias Olympia/Meise (1/48). **Czech resin kits (1/72):** \$18.00 Northrop N9M (flying wing); Panzer II Luchs, Polish Tankette TKS. \$16.00 Me-309; Bell P-63 Kingcobra; XP-67 Bat. \$12.00 Bucker Bu-131, Bu-181; Arado 199; Panzer 39T Skoda. **Czech resin (1/48):** \$20.00 La-7; Ta-152H. **Finnish vacuform (1/72):** \$6.00 Myrsky II (with resin parts and decals). **Russian injection (1/72):** \$7.00. Glider G-11. **Russian vacuform (1/72):** \$7.00 UT-2, I-250, La-15, La-150. \$6.00 I-4, I-185, SPL. **Polish vacuform (1/72):** \$6.00 UT-1. **Pegasus injection (1/72):** \$8.00 Roland Vlb, Ansaldo SVA 5. **Tamiya (1/50):** \$15.00 Aichi Val.

"I also have the following books and magazines for sale or exchange: 'Fejezetek a magyar katonai repules tortenetebol' (History of Hungarian Air Force 1911-45) 305 pages, 125 b&w photos, 19 drawings, plus maps and graphics (\$18.00). 'Solymok Hejak Nebulok' (History of MAVAG Factory 1936-44) Weiss Manfred WM-21, Reggiane Re-2000, Arado 96, M 25 Nebulo, etc. 126

pages, 23 b&w photos, map, graphics, codes of aircraft built (\$10.00). Letectvi + Kosmonautika (Czech) 10, 12, 14, 15, 19, 20, 22-24 1982; 2-5 1988; 16 1989; 5-7, 10 1990 (\$1.00 each or \$15.00 all). Aerei Modellismo (Italian) 1, 11-12 1990 (\$1.00 each). Aero Historia (Hungary) Dec. 90 \$4.00. Uj Szarnyak (Hungary) 7/90, 10/91 (\$2.00 each). IPMS Mallari 16, 18, 39-40, 52, 70, 71, 72, 75, 76, 77, 78, 79, 82, 83, 84-85 (\$3.00 each or \$40.00 all). Pienois Malli (Finland) 1, 8/89, 1/90 (\$2.50 each). Siivet (Finland) 4/88, 3/91 (\$2.50 each). Flygrevyn (Sweden) 5/90 (\$3.00). TBU (Poland) Su-7 (\$2.50). Barwa w Lot. Polskim (Poland) #1, #3 (\$3.00 each). Modelism (Romania) 1/84, 1/88, 1/90, 2/90, 5-6/90, 1/91, 3/91 (\$4.00 each). Viata Armatei (Romania) 6/90 (\$1.00). Aripa (Romania) 1/91 (special He-112) \$4.00. Flaps Up (Romania) 1/90-1/90 \$1.00. "Ilustrierte Reihe fur den Typensammler" (East German) L-29 Delfin and Mil Mi-1, booklets with film for building paper kit (\$4.00 each). Russian book with very good drawings and color profiles of MiG-3, LaGG-3 and La-5; 55 pages, 21 photos, 21 pages of drawings, 40 color profiles (\$10.00).

"I need the following: Magazines (original or photo copy) IPMS Belgium KIT 2/86 (Klemm Kl-35; Home vacuformer); Flying Review International, Oct. 69 (Hungarian airplanes); Air Combat Vol 4 No. 1 (Curtiss H-75A & CW-21 of NEIAF); IPMS Magazine 3/89, 4/90 (Airwar over the Balkans, NiD-52); Aero Historia Dec. 88 & June 90; II Notiziario 8-9/84 (Hungarian airplanes); PKC3/84; Air Combat May 75, Nov. 76, Jan. 77, Nov. 77, Mar. 78; Mitteilungen 1/87 (Me-109 Hungary), 5/90 (Bulgarian AF). Books: '55 Years of Yugoslav Aviation' Radosavljevic; 'Van Glenn Martin en Mustang' Hooftmann; 'Van Brik tot Starfighter' Hooftmann. Kits 1/72: Airframe Vultee P-66 Vanguard (or other short run or resin); Execuform Vultee V-1A; Monogram Curtiss F-11C; resin conversion kit for 52C1 from Heller NiD-622; Czechmaster Ki-30 Ann and Ki-32 Mary. Photographs of aircraft WWII period in Romanian, Hungarian, Croatian, Slovenian, Yugoslav, Greek, Bulgarian AF colors. (I have many rare photo for exchange.) I also need information and good drawings of Yugoslav ZMAJ aircraft."

Pascal Faucard (SAFCH #571), 26 Avenue Raoul Aladenize, 18500 Hehun sur Yevre, France.

[Editor's note: These prices are very good, and although Pascal doesn't mention it, they do not include postage. This is great for a trade, but if your buying, add sufficient money to cover Pascal's postage costs.]

"**Wanted:** Information on Indian, Pakistani, Egyptian, Syrian, and Iraqi aircraft of Soviet design that carry any kind of kill markings."

David M. Knights (SAFCH #1171), Box 22272, Louisville, KY 40252.

"**Wanted:** Slide trading partners for military a/c. All letters answered in two days."

Patrick Martin (SAFCH #531), 8731 Odlin Road, Richmond, B.C. Canada V6X 1C7.

AIRCRAFT IN THE BALKAN WARS

John Cochran

INTRODUCTION

Between 1815 and the early years of the 20th Century, peace had been maintained in Europe by a balance of power between the larger countries. However, each was always ready to tip the balance in their favor and the smaller European countries were aware that they would be used as pawns in this power struggle. With Austria, Russian, and Turkey perpetually on the edge of conflict, and with Germany, Britain, France, and Italy in the background, the Balkan countries were a fertile area for manipulation. On a smaller scale, Bulgaria, Greece, Serbia, Montenegro, and Romania had their own aims, usually at the expense of Turkey.

In the late 19th Century, the once great Ottoman Empire was crumbling. France had formally established rule over Morocco, Algeria, and Tunis, and Britain was 'protecting' Egypt. When the Italians decided to take over the last remaining piece of Turkish North Africa, Tripoli and Benghazi, the Turks fought back. However, the Italians controlled the sea, and Britain would not allow the passage of Turkish troops through Egypt. The Great Powers kept out of the conflict, but would not allow a projected Italian attack on Constantinople. Aware of the problems that Turkey was having in Libya, as well as internally, the Balkan states saw this as the right time to act. During October 1912, Serbia, Bulgarian, Montenegro, and Greece were drawn into a war with Turkey.

The use of the aeroplane in war had been discussed since the Wright brothers thought they had invented something that would make war impossible. In 1899, the Hague Convention, consisting of all advanced military powers, had unanimously outlawed the use of explosives dropped from aerial devices (balloons then, of course). However, theories and ideas developed in the USA, France, and Italy during 1910 and 1911, were put to the test by the Italians in the 1911 Libyan campaign. There were some military minds in all the major powers who saw the implications only too clearly. But it was as a method of reconnaissance that the aeroplane was seen as its most useful. This was the main use of aircraft in Libya, the Balkan Wars, and the early months of the First World War.

During the summer of 1912, several officers of various Balkan armies wished to learn to fly. Serbian, Greek, Bulgarian, and Turkish officers went to the new training schools in France, Germany, Britain, and Russia. Turkey had asked for German help in setting up a school of Military Aviation at Bulgurlu, and had voted 17,000 Turkish pounds for this as early as 18 March 1912. Unfortunately, the eight aircraft ordered from Germany were refused transit across Bulgaria, as that country wished to remain neutral in the Turkish-Italian conflict. In April 1912, the Italians attacked the Dodecanese Islands, and the air war was brought to the Balkan doorstep when, on 14 May, Italian aircraft dropped bombs on the Turkish supply depots on the Island of Rhodes.

In October, the Balkan officers rushed home bringing with them some knowledge of war flying, all theoretical, and a small number of aircraft.

BULGARIA

As early as the spring of 1912, two Bulgarian army officers, LTs Toprakchiev and Petrov, went to Russia for training. They returned in July with a Bleriot monoplane. In July 1912, Bulgarian officers went to Germany, France, and Britain. Four Albatross aircraft were ordered from Germany in October, and were shipped back to Bulgaria. To fly them, two Germans, the cycling champion Bruno Beuchner and one of their instructors, Albert Rupp, were invited to Bulgaria. Another Albatross was to be flown by LT Milkov, one of the Germans' star pupils. The fourth Albatross was lost when LT Popristov was killed when he collided with a Taube monoplane over the German training ground of Johannistal, near Berlin. Returning from France, LT Kalinov brought a Voisin and LTs Mitev and Stoganov brought two Sommers biplanes. The officers training in Britain made many useful contacts with aviators of other nations, even Turks, but especially an Englishman, Snowden Hedley, and an Italian, Giovanni Sabelli, who were later invited to fly for Bulgaria. LT Milkov and the two Germans survived an arduous land journey to Sofia, and on 26 October 1912, the Bulgarian officers made the first reconnaissance flight over Adrianople in one of the Albatrosses.

In mid October, Petrov and Toprakchiev were sent back to Russia to purchase aircraft. They bought indiscriminately, and rather unwisely, and then set about training other officers on a random collection of unsuitable machines. This training was, to put it mildly, disastrous. Within a week, one of the two Bristols bought from England, and all three Albatrosses were destroyed in accidents on the ground. LT Toprakchiev was killed while trying to land a Russian-made Bleriot. The end result was to almost cause the Bulgarian military to abandon any idea of forming an air fleet, but they were persuaded by the Russians to continue.

Three Russian airmen, Efimov, Agafonov, and Lerche volunteered to undertake training and action on behalf of the Bulgarian government. Efimov collected the first combat damage from Turkish ground fire while dropping leaflets over Adrianople. When Bulgarian forces captured the Turkish town of Kirk-Kilise, on 23 October, they found two brand-new Albatrosses. Turkish prisoners said that they had some aircraft but no pilots or mechanics. These aircraft were later flown back to the Bulgarian base at Mustapha Pasha by Agafonov and Lerche. Lerche was soon sent back to Russia after he destroyed two aircraft in taxiing accidents.

It was becoming obvious that the Bulgarians did not have the skill to maintain, fly, and train other pilots. The Russian aircraft entrepreneur Schetinin was asked to set up a complete military aviation establishment in Bulgaria. This was to consist of four pilots (Kostin, Kolchin, Esyukov, and Sielov), two mechanics, several laborers, and four Henri Farmans N7s with Gnome 50-hp engines, two spare engines, two spare propellers, a full set of tools, and large waterproof collapsible hangers, designed by another Russian, LT Ulyanin. All this equipment was crated and dispatched by train and steamer to Mustapha Pasha. The aircraft were housed in the hangar tents, while the

men, pilots, mechanics, and laborers slept in the large packing crates.

In November 1912, the River Moritza flooded, and the entire camp was moved several hundred yards in just a few hours. This proved the flexibility and mobility of an air detachment, but also showed the need for transport, not only to move the base but also to go the rescue of any downed aircraft.

It must be appreciated that because of the weather and the frequent need for maintenance and repair, there were not many days when aircraft were available. The Bulgarian Third Army began their attack on Luleburgaz on 29 October by sending out a large reconnaissance force to find out the position of the First, Second, and Sixteenth Turkish Corps who were defending the town. This resulted in very large loss of life on the Bulgarian side. Although they eventually won the battle, this loss could have been totally saved by the use of aeroplanes, but none were available on the day. The same thing happened when the Bulgarians were repulsed with great losses from the Chataldja defenses on 18 November. On one of the occasions when it was possible to use aircraft, on October 30, LT Popov, a Russian volunteer, was shot down and killed over Adrianople. He may have been the first aviator to die in combat.

General Ivanov, commanding the Second Bulgarian Army, besieging Adrianople, was very keen to use aircraft. The first use was dropping leaflets on the Turks in the city suggesting that they surrender. Mercenary flyers, including Snowden Hedley and the Italian Sabelli, were engaged in this activity as it was considered non-combat duty. Bulgarians and Russians were used for bombing the town. This was done in a very primitive way. The 10-kg bombs were hung by a loop of rope around the pilot's foot. When he judges himself over the target, he shook his foot to release the bomb. This was not very accurate, but, more importantly, necessitated flying very low, which invariably resulted in damage from ground fire. Kostin, one of the Russian pilots, was brought down by gunfire over Adrianople. Although unhurt, his aircraft was destroyed and it took a very high-level of great-power diplomacy to have him released.

Another use General Ivanov made of his aircraft was in communications between his forces and the Third Army at Chataldja. On one occasion, three aircraft flew together: Esyukov and Kolchin flying Farmans, and LT Petrov, now the Bulgarians' most experienced pilot, in a Bleriot, were used for this. The 94-mile trip was accomplished in two hours. Because the mechanics travelled overland, the aircraft could not be used until they arrived a week later.

Bad weather in early December allowed only a few photographic missions over Chataldja, but the Turkish ground fire was improving. Doctor Ferdinand, a French volunteer, was shot down while flying over the Chataldja lines at 400 feet. Although he made it back to the Bulgarian lines, he died shortly afterwards. Preparations were well under way to use two Russian Farmans on a bombing raid on Constantinople, when the armistice of 16 December intervened.

While the peace was being negotiated, there was a coup in Turkey on 23 January, and hostilities were reopened on 3 February when the Turks tried to lift the siege of Adrianople. The city fell to the Bulgarian Second Army on 26 March and the final peace was achieved on 30 May.

The Russian detachment, organized by Schetinin, returned home after the December armistice and the following order of battle of the Bulgarian air fleet was listed for 23 January:

- 2 Bleriot single seaters Gnome 50 hp
- 2 Bleriot single seaters Gnome 50 hp (Russian built)
- 2 Bleriot two seaters Gnome 70 hp
- 2 Russian Nieuports Gnome 70 hp
- 2 Bristol monoplanes
- 2 Bristol biplanes
- 1 Sommers
- 1 Voisin
- 4 Albatrosses (at least one ex-Turkish)
- 5 Russian-built Farmans
- 2 unspecified Russian-built 3 seaters Gnome 50 hp

Bulgaria was very dissatisfied with the concessions given to Greece and Serbia at the peace conference and started the Second Balkan War on 1st July 1913. This time, Bulgaria fought not only against Turkey, but also her former allies. Romania also stepped in and invaded Bulgaria from the north. This war lasted just one month and was a total and complete defeat for Bulgaria.

The Bulgarian Aviation Corps took very little part in the July 1913 campaign, for without the foreign volunteers and the considerable Russian involvement, the availability of pilots and aircraft was virtually nil.

SERBIA

In 1912, six Serbian army officers, LTs Tolgovic, Novicic, Yugovic, SGT Petrovic, and Major Miletic who commanded the Serbian air squadron, were sent to France for training at the Bleriot and Farman schools. In October 1912, they returned to Serbia bringing with them three Bleriot and three Farmans. Four French aviators, Raoul de Reales, Emile Vedrines, Godefroi, and Bourdin, also volunteered their services and they contributed two two-seat Deperdussin monoplanes. These airmen were soon joined by some Russians: Agafonov, who had already seen action with the Bulgarians, Kirstein and Abranovic, who brought with him a German copy of a Wright biplane. The other two brought Russian built Farmans. Novicic and Yugovic were both injured and their Farmans destroyed in training accidents, while Petrovic was killed crash landing his Farman.

Serbian aircraft saw no action during the Macedonian campaign, but they did assist the Montenegrin and Serbian armies besieging the town of Scutari (now Shkoder, Albania). They not only carried out visual and photographic reconnaissance, but dropped bombs and grenades on Turkish positions near the town. Scutari fell on 22 April 1913 after heavy loss of life on both sides.

When Bulgaria attacked Serbia in the Second Balkan War, aerial activity was almost entirely confined to reconnaissance. It is recorded that LT Tomic, flying a Bleriot of the Serbian air squadron, came across a Bulgarian Bleriot. As neither aircraft was armed, the pilots saluted each other. As Tomic and most of the Bulgarian had received their training in France, it is almost certain that the two adversaries knew each other personally.

MONTENEGRO

No air activity reported except on the 29 October 1912 four Russians had volunteered to fly with the Montenegrin army. As this would have been to cover the siege of Scutari, it is possible that this report may have been referring to the Russian volunteers with the Serbian army.

GREECE

Four Greek army lieutenants (Camberos, Notaras, Moutoutissis, and Adamidis) took part in air training in France in the summer of 1912. On 1 September 1912, an aviation unit of the Royal Hellenic Army was formed with these officers and four Henri Farmans, one of which was a floatplane. A French volunteer, Captain Bares, was in command.

Beginning with Turkey's declaration of war on Greece, on 18 October, reconnaissance flights were carried out over the Thessaly and Epirus fronts. On 26 October, the Greek government ordered five Aviatiks from Germany at a cost of 250 pounds each.

On 1 November 1912, the first Greek aerial loss occurred. Mr. Argyropolous, a Greek civilian volunteer, was shot down while flying from Larissa to Kozhani, on the Epirus front. His Henri Farman was destroyed, but he survived. One week later, on 8 November, Greek forces took Salonica.

The Greeks now besieged the town of Yannina, and, on 8 December, LT Moutoutissis dropped several bombs 'with good effect', on Turkish positions in Yannina, but his machine collected many bullet holes in return.

When war was resumed in February 1913, the Greeks used their aircraft to attack Turkish naval positions in the Dardanelles. On 6 February, the Farman floatplane, operating from the island of Lemnos, found units of the Turkish fleet off Nagara. Four bombs were dropped, two landed on ships and two on land fortifications. Later that day, another three bombs were dropped but all fell harmlessly either on land or into the sea.

Although there were skirmishes on the Thessaly front, Greece took little part in the Second Balkan War. Peace with Bulgaria was achieved in August 1913, but the Turkish peace settlement took until March 1914. This was signed on the same day that a British Military Mission arrived to assist the build up of an organized Hellenic military aviation fleet.

ROMANIA

The Romania army flying corp was formed as early as 1910, with strong French connections. By December 1911, Romania possessed one two-seat and three single-seat Bleriot and four Henri Farmans. A Romanian officer, Vlaicu, was already designing and flying his own aircraft. The 1912 bombing competition, in Vienna, was won by a Vlaicu. On the strength of this performance, the Romanian government ordered several of these aircraft as well as two Morane-Saulnier Fs and a locally-built Bristol, called a Coanda.

Romania stayed neutral in the First Balkan War, but when Bulgaria attacked Serbia during the second war, Romania invaded the disputed Dobrudja region and occupied it without a shot. It is believed that Romanian aircraft flew reconnaissance missions during this invasion.

TURKEY

Turkey did not possess any aircraft during the Libyan campaign of 1911. However, they had seen how useful they were to the Italians. So, during the early months of 1912, the Turkish authorities gathered together a varied collection of aircraft and mercenary flyers. Some Turkish officers were sent to France and Germany and two were sent to the Bristol training school on Salisbury Plain. They had very little training before being recalled to Turkey on the outbreak of war. At the beginning of

the first Balkan War, the Turkish army had at least the following machines:

- 2 Nieuport monoplanes
- 1 Deperdussin monoplane
- 1 French REP
- 1 British-built Bristol
- 1 Taube monoplane
- 1 German-built DFW Mars

The Taube was a German-built aircraft constructed by Harlan and flown by the German mercenary Adolf Rentzel. The Mars was flown by Reinhold Jahnow, who was to be the first German aviator to die in World War One (12 August 1914).

Very few Turkish officers flew aircraft during the two Balkan campaigns, but many acted as observers, including the eventual president of the first Turkish Republic, Kemal Ataturk. In fact, during Ataturk's campaign against the Greeks, in 1922, Turkish aircraft were used to deadly effect.

By the end of these campaigns, it became obvious to the Turks that, had they had suitable air forces available, they could have kept in touch with their forces besieged in Adrianople. Not only that, but because of the frequent flooding by the River Maritza, only one bridge over the river was intact. One flying machine could have harassed, or even destroyed, this bridge, thereby lifting the siege.

AIRCRAFT MARKINGS OF THE BALKAN CAMPAIGNS

The first recorded use of national aircraft markings was during the various trials held in Vienna and Budapest in 1910. These trials were of a competitive nature and each aircraft carried its nation's colors in the form of wing-tip stripes. Prizes were won by competitors from at least Russia, France, Italy, Romania, Poland, and Bohemia. (The entries from Poland and Bohemia carried the red and white of Austria.)

While there is no confirmation of the use of national markings by Italy in the North African campaign or by France and Spain in Morocco, national identity markings were certainly used in the Balkan Wars.

BULGARIA: It is recorded that the national colors of red, white, and green were painted on the lower wings at the beginning of the war in October 1912. What form these markings took is not known, but if true, it is the first recorded use of national markings on military aircraft. On the evidence of photographs, the outer portions of the wings were painted red on one side and green on the other. (This scheme was adopted by the Italian air forces in 1915.) The rudders were marked with the colors of the Bulgarian flag: white over green over red.

GREECE: There is a Henri Farman replica in the Greek War Museum which carries blue, white, and blue stripes across the wing tips. However, contemporary photographs show these aircraft with blue, white, blue, white, blue stripes across wing tips, tailplanes and front stabilizer.

TURKEY: Although the date of introduction is uncertain, by 1913 Turkish aircraft had large areas of their wings painted red with a white star and crescent. The rudders were painted red and similarly marked. This marking was used until 1915.

SERBIA: There is no information concerning any Serbian marked aircraft during the Balkan Wars. However, during the First World War, Serbian aircraft used both the French and Russian roundel, as these red, white, and blue markings were in

the national colors. If French and Russian aircraft carried national colors in the 1912 to 1913 period, it is reasonable to assume that they would have been retained in Serbian service.

ROMANIA: There is no record of Romanian markings before that country's entry into the First World War, although Romanian aircraft were successful in the Vienna trials in 1910 and 1912. The aircraft supplied in 1915 were all of French origin and were supplied with French roundels. The white portions of these were overpainted yellow to conform with Romanian national colors.

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13. Encyclopedia Britannica and several good books on the modern history of Greece, Bulgaria, Turkey, and Yugoslavia.
14. Contemporary reports mostly from issues of the London Times, the Illustrated London News, 'Flight', and 'Aeroplane'.

My thanks to IPMS-Greece, August Blume, Don Van Winkle, Terence Charman of the Imperial War Museum, and LT COL Yotov of the National Military Museum, Sofia.

John Cochrane (SAFCH #905), 6 Bennington Ave., Crosby, Liverpool, L23 7YJ, England.

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"A new company in Poland, AKO Co. Ltd, has recently released a series of photographic instrument panels. Included are the Yak-23, Mi-28, MiG-19, MiG-21, MiG-29A, PZL P-23 Karas, Yak-15, F-15A, and F-15B in 1/72 scale. The MiG-21 and MiG-29A are also available in 1/48 scale. Their list of future releases is very extensive: Su-22, MiG-23, Su-27, AH-64 Apache, Ar-234, Mi-24, He-219, Spitfire IX, and He-126 in 1/72 scale with the Su-22, MiG-23, Ar-234, Spitfire, and He-126 also in 1/48 scale; and the Spitfire also in 1/32 scale." Wojciech Butrycz (SAFCH #981), ul. Facimiech 12A m.25, 30 667 Krakow, Poland.

[Editor's note: Wojciech included a copy of the instruction sheet for the MiG-29, The set apparently includes two parts that are layered to produce a

three-dimensional effect. This looks like an interesting approach to an old problem and I'd like to see a review by anyone who has used one of these.]

AERO RESEARCH, Aircraft Conversion and Detail Parts. Our long-time friend, Jay Sherlock (SAFCH #431) has available an excellent selection of parts and decals from a great variety of sources. Included in his catalog are the products of Aeroclub, Airwaves, DB, Falcon, Maintrack, Missing Link, Model Technologies, PP Aeroparts, Xtradecals, and many others. I've mentioned only those that occupy more than one page in his catalog. The selection is extensive, the prices are reasonable, as are the shipping charges. Best of all for US members, you can pay by check in US\$.

Write to Jay (Aero Research, 1385 Tioga Way, Reno, NV 89503-1953) for his 32-page catalog. I'm not sure what this costs, but he offers a subscription to his monthly UPDATE at \$2.50 for six issues. "Unless you are ordering very frequently, we urge you to subscribe to this service or you may miss the announcement of many different products as they are added to our stock as well as price changes." Jay also sells slides. All slides are guaranteed to be originals. The price is \$0.75 each with a minimum order of 5 slides and shipping is very reasonable. Write to Jay, at the above address, for a list of available slides. Price is again unknown, but you can't go far wrong if you include a SASE.

"The Naval Institute Press has contracted me to compile and edit a 700-page, large format, reference book detailing every type of military aircraft currently in service with the world's air forces. Unlike volumes in the 'Jane's All the Worlds Aircraft' series, it will contain details not only on aircraft, weapons, and systems currently under development but also on older types no longer in production but still serving with the world's air forces. The Naval Institute Press plans to release the first edition of the 'Naval Institute Guide to World Military Aviation' in 1993 and will publish updated editions every other year thereafter. The intent is to produce a book retailing at not more than 2/3 the price of 'Jane's' but of greater usefulness by providing within the cover of a single volume information on all types of aircraft currently in military/government service. This can be done by eliminating sections on airliners, GS aircraft, sport aircraft, microlights, sailplanes, hand gliders, airships, and balloons which are useless to military operators.

"The publisher and I want to illustrate each type of aircraft and each of the world's air forces with a minimum of one photograph showing aircraft currently in service. Hopefully, none of these photos will have been taken more than five

year's ago.

"You will not be surprised when I tell you that locating photographs with which to illustrate some of the smaller air forces is a much more difficult task than selecting from a plethora of photos of the latest aircraft of the CIS Air Force. "Will fellow SAFCH members be willing to provide a photograph of aircraft or helicopter currently in service with the air force or government agencies of the following countries: Bahamas, Burundi, Cambodia, Cape Verde, Costa Rica, Cyprus, Djibouti, Equatorial Guinea, Guinea-Bissau, Liberia, Maldives, Mauritius, Myanmar (Burma), Sierra Leone, Tonga, or Uganda?"

"I am also looking for photos of the following aircraft/air force: Aerotec Uirapuru (Bolivia, Brazil, Paraguay); Beech Twin Bonanza (Haiti); Bellanca Citabria (Turkey); Cessna 172, 180, 182, 185 (any current military markings); Cessna Caravan (Brazil, Liberia, South Africa); Convair 440/C-131 (Bolivia, Paraguay); Catalina (Paraguay); DHC-2 Beaver (any current military markings); DHC-4 Caribou (Cameroon, Malaysia, Thailand); DHC Dash 7 (Venezuela); FMA IA 50 Guarani (Argentina); Fokker 50 (Tanzania); Fokker 100 (Ivory Coast); Harbin Y-12 (Peru, Sri Lanka); Helio Super Courier (Peru); IAI Arava (any current

military markings); Neiva Regente (Brazil); Neiva Universal (Brazil, Paraguay); Piper Arrow, Aztec, Cherokee, Cheyenne, Dakota, Seminole, Seneca, Super Cub, Tomahawk (any current military markings); Rockwell Commander/Shrike Commander (any current military markings); SOKO P-2 Kraguj (Yugoslavia); UTVA-66 (Yugoslavia); UTVA-75 (Yugoslavia); Yak-11 (any current military markings).

"I can't tell you how much any and all help will be appreciated. Filling these photo gaps is now top priority if the 'Naval Institute Guide to World Military Aviation' is to be published on schedule."

Rene J. Francillon (SAFCH #505), 111 Bluebell Place, Vallejo, CA 94591-8044.

[Editor's Note: What a fantastic book this can be. It will eliminate all the faults (at least they're faults for small-air-force enthusiasts) of current publications. If anyone can carry this off, Mr. Francillon can - his reputation for productivity and accuracy is well known. Here is a chance for us to put our lens caps where our mouths are. If enough of us really believe in the purpose of the SAFCH, we should be able to bury Rene in photos.]

AIRCRAFT OF THE CHACO WAR 1932-1935

Part II: Bolivia

Antonio Luis Sapienza

Background: Bolivia bought a total of 88 planes between 1925 and 1934: 15 fighters, 20 fighter-bombers, 21 bombers, 13 trainers, and 19 transports. The League of Nations only vetoed the acquisition, in 1934, of 4 Curtiss Condor BT-32.

Fighters

1. Vickers Scout Type 143: (6) 1929-35; serials 7, 8, 9, 10, 11, and 12 (Later, three were reserialled 54, 59, and 96.) Two Scouts were lost in accidents before the war. Scout "96" shot down Paraguayan Potez "6" in 1932. Another Scout shot down Fiat "11-1" in 1933. Scout "96" was lost in an accident in 1935.

2. Curtiss-Wright F11C-2 Hawk II: (9) 1933-39; serials 30, 32, 34, 36, 38, 40, 42, 44, and 46. Hawk "30" was shot down by Paraguayan AA guns on 26 December 1934. The surviving Hawks were used at the Military Aviation School after the war.

Fighter-Bombers

1. Curtiss-Wright CW-C14R Osprey: (20) 1933-46; serials 11, 13, 20, 22, 25, 30, 39, 45, 50, 60, 62, 64, 68, 78, 87, 91, 93, and 95. (Two Osprey did not carry serial numbers.) They were used as fighters and bombers throughout the war. Several Osprey were lost in accidents during the war due to its high landing speed and the poor condition of Chaco runways. The Bolivian "ace", Maj Rafael Pabon, and his gunner, Sgt Mario Calvo, were shot down in an Osprey by the Paraguayan Potez TOE "11".

Bombers

1. Fokker C.VC: (5) 1925-39; serials "Fokker 1", "Fokker 2", "Sgto. Max Paredes", "Bolivia", and "Mcal. Sucre". A C.VC was lost before the war on the La Paz to Rio de Janeiro flight. Another C.VC participated in a bombing mission over Bahia Negra (Paraguay) in 1928 during an early friction between Paraguay and Bolivia. They were not used as bombers during the Chaco War, being employed, instead, as bomber trainers.

2. Breguet XIX A.2: (6) 1926-34; serials "Potosi", "La Paz", "Ingavi", "Batalló Colorados", "Uncia", and "Boqueron". "Ingavi" was lost in an accident before the war. When the Chaco War began, only three Breguet XIX were still in flying condition.

3. Vickers Vespa Mk.III Type 149: (6) 1929-35; serials 1, 2, 3, 4, 5, and 6. (There were later 18, 23, and 44.) Vespa "3" was lost in an accident at Santa Cruz in 1930. They were used as bombers and reconnaissance planes during the Chaco War, usually escorted by Vickers Scouts. Vespa "5" was shot down by the Paraguayan AA guns on 31 July 1932; its crew, Lt Belmonte and Sub Lt Saavedra were captured. Vespa "6" was also shot down by AA guns on 25 February 1933. Vespa "23" was lost in an accident, in 1934, when its propeller fell off.

4. Curtiss-Wright Cyclone-Falcon: (4) 1934-51; serials 207, 208, and 209 (One Cyclone-Falcon did not receive a serial number.) Two Falcons were shot down in March 1935 by AA guns. The other two survived the war and were used as tow planes for gliders until 1951!

Trainers

1. Caudron C.97: (4) 1926-34; serials "Illampu", "Chorolque" (later "Cap. Valle"), "Sajama", and "Stgo. Flores" (later "Oruro I"). Only one C.97 was in flyable condition when the Chaco War broke out. It was used as a trainer during the conflict.

2. Vickers Vendace III Type 155: (3) 1929-33; serials 1, 2, and 3. Vendace "1" was destroyed in an accident in 1931. Another was lost in an accident before the war, and only one trained pilots during the conflict. This Vendace was unflyable and had to be destroyed when the Bolivians evacuated Saavedra in 1933.

3. Junkers A.50 Junior: (3) 1930-40; serials "Piray", "Warnes", and "Acre". A.20 "Acre" was destroyed in an accident in 1933. The other two survived the war.

4. Curtiss-Wright Trainer: (3) 1934-38; serials "Trainer 1", "Trainer 2", and "Trainer 3". One Trainer was lost in an accident in 1934. The other two survived the war.

Transport Planes:

(All transport planes used by the Bolivian Army were acquired by the Lloyd Aereo Boliviano (LAB) and transferred to the Military Aviation during the war.)

1. Junkers F-13 L/W: (7) (4 "L" Land and 3 "W" Water) 1925-41; serials "Oriente", "Oriente II", "Illimani", and "Charcas" were F-13L; "Beni", "Chaco", and "Mamore" were F-13W. "Oriente" was lost in an accident in 1926. "Chaco" had the same luck in 1928, as did "Oriente II" in 1929. When the Chaco War started, only four F-13's were in service. "Charcas" was destroyed in flight during a storm in 1934. The three surviving F-13's were given back to LAB after the war and they flew until 1941.

2. Junkers W.34: (2) 1929-42; serials "Vanguardia" and "Tunari". Both W.34's were heavily used during the Chaco War and both survived to be given back to LAB.

3. Ford 5-AT-D Trimotor: (1) 1932; serial "Cruz del Sur". It was lost in an accident in 1932 when it was overloaded with ammunition and gasoline.

4. Junkers Ju.52/3m: (5) 1932-44; serials "Chorolque", "Huanuni", "Juan del Valle", "Bolivar", and "Illampu". They were used as troop carriers. Ju.52 "Chorolque" was destroyed in an accident in 1936. "Huanuni" had the same luck in 1937 as did "Juan del Valle" in 1940. "Bolivar" was sold in 1943 to Aeroposta Argentina and "Illampu" went to VASP of Brazil in 1944.

5. Junkers K.43: (3) 1934-43; serials 101, 102, and 103. Although the K.43's were acquired as passenger planes for LAB, they were converted to troop carriers and bombers. They had bomb racks under the wings. K.43 "103" was destroyed in an accident in 1935. The other two survived the war and were re-converted to passenger planes for use by LAB.

6. Sikorsky S.38: (1) 1934-41; serial "Nicolas Suarez". Although it was never in the Chaco region, LAB used the S.38 since 1934 in regular flights inside the country until its fatal accident in 1941. It was not operated by the Military Aviation.

Acknowledgments: Many thanks to Mr. Ramiro Molina Alanes, Chief of the Bolivian Air Force Archives, for his cooperation.

Antonio Luis Sapienza (SAFCH #1160), PO Box 2721, Asuncion, Paraguay.

AIR WARRIORS OF PAKISTAN, Hussaini. 62 pages 26.5 cm by 21.5 cm. Softbound. Published by Ferozsons Ltd., 60-Shahrah-e-Quaid-e-Azam, Lahore, Pakistan.

If you're a collector of books on aviation art such as those by Keith Ferris or Frank Wootton and also an enthusiast of the small air forces, here's a book that will fulfill both desires. Published on high-quality, glossy paper with vibrant colors, this book is every bit a good as similar publications done in the West. Most of the paintings are reproduced in full-page format, although a few extend across two pages, and a few others are set two a page. Most of the painting depict a particular moment of history of the Pakistan Air Force and extensive captions provide the historical content, usually stating the time and place as well as the units and names of the pilots involved. Most are of combat situations, aerial dog fighting or ground-attack missions, where only a painting can catch the action since cameras could, obviously, not be involved.

The painting cover the period from the formation of the Pakistan AF in 1947 illustrated by a Spitfire VII of 9 Sqn. taxiing on a dusty forward airstrip ("History of the Pakistan Air Force 1947-1982", by Hussain & Qureshi, does not mention any Spitfires in PAF service, but 9 Sqn. did use Spitfires before independence and Hussaini's captions says they were used from independence in August 1947 to December 1947) to clashes on the Afghanistan border in 1988 illustrated by F-16 destroying an intruding Soviet Su-25. In between, we get action views of Tempest, Dakotas, Texan, Fury, Attacker, Albatross, Sabre, F-104, B-57, F-6, A-5, and Mirage. A typical painting of an aerial action shows the F-86 of Flying Officer Shams destroying an Indian AF Su-7 over Tejgaon airfield, Dacca, on 4 December 1971. A typical painting of a ground attack shows 19 Squadron's Sabres (Squadron Leader Sajjad Haider) destroying Indian AF MiG-21s on the ground at Pathankot airfield on 6 September 1965.

This reviewer has no way of determining if the aircraft's colors and serial numbers are correct for the actions depicted, but, since the artist works closely with the Pakistan AF (all the original paintings hang at PAF facilities), it is safe to assume that they are as accurate as humanly possible.

The last two paintings in the book are particularly interesting: The first shows an Iraqi Hunter, flown by Flight Lieutenant Saiful Azam, PAF, destroying an Israeli Mirage over Iraq at 1130 hours, 7 June 1967. The second shows a Syrian MiG-21, flown by Flight Lieutenant Sattar Alvi, PAF, destroying an Israeli Mirage over the Golan Heights at 1532 hours, 26 April 1974.

Several copies of this excellent book have been provided to the SAFCH by SAFCH member Leif Hellstrom, and they are available through the SAFCH Sales Service.

WILDCATS OVER CASABLANCA, November 1942 - Operation Torch, John Lambert. 48 pages 8.5 inch by 11 inch. Softbound. 37 photos, 2 maps, 6 tables, 3 color side-view drawings. Phalanx Publishing Co., 1051 Marie Ave., St. Paul, MN 55118. \$11.95.

Don't let the title fool you - this is not a reprint of **WILDCATS OVER CASABLANCA**, published in 1943. That book, although written by two naval aviators who participated in the invasion of North Africa (with the admitted assistance of a journalist), leaves much to be desired. There's no question about it being a ripping good read, but because

of war-time censorship, it lacks detail. For example, it describes the actions of "Blue" and "Red" Squadrons operating from a generic carrier. Now, with the use of declassified records from the Naval Historical Center in Washington DC and from the *Service Historique de l'Armée de l'Air*, Jack Lambert has put the story into perspective.

The story is told in eight short chapters: The Prelude: Dawn, November 8, 1942; Mid-Morning, November 8, 1942; Elsewhere, November 8, 1942; P.M. November 8, 1942; November 9, 1942; November 10, 1942; Post Mortem, November 11, 1942. Each air action is fully described, mostly by the participants themselves; both US and French. The photos of US Wildcats, Dauntlesses, Avengers, Piper Cubs, and Vichy Hawk 75s, Dewoitine 520s, Douglas DB-7s, Martin 167s, etc. are either of aircraft participating in Operation Torch or aircraft operating from the Ranger or with North-African Vichy units of the proper time period. (The inclusion of photos of aircraft in markings having nothing to do with the action being described is one of my pet peeves, particularly when the caption does not make this clear.)

There are three excellent color side-view drawings: Wildcat '41-F-17', Curtiss Hawk 75 of CGII/5, and a Dewoitine 520 of an unidentified Vichy unit. A full-page color painting shows LTJG Windy Shield's Wildcat '41-F-22' breaking up an attack by two Vichy Hawk 75s on LTJG Chuck August's damaged Wildcat '41-F-15'.

Appendices, which are outstandingly informative, include: US Navy Aerial Order of Battle; French Aerial Order of Battle; US Naval Aerial Combat Claims; French Aerial Combat Claims; US Naval Combat Casualties; French Fighter Pilot Casualties; US Naval Aircraft Losses All Causes.

When I started to read this book, I couldn't put it down and I finished it in one sitting. This provided me with a feel of the chronological development of the campaign. Then, on succeeding nights, I re-read this book, leafing back and forth to follow the fortunes of a particular squadron (such as hard-luck VGF-29) or the exploits of a particular pilot, who by now had become a personal friend. This is how I like history; up close and personal.

Although the 50th Anniversary of Operation Torch will have passed by the time you read this review, this book should inspire the modeler in you to build to a theme. At a minimum, it calls for a VF-41 Wildcat with its yellow-outlined insignia and an Escadrille Lafayette Curtiss Hawk 75 with its yellow-and-red-striped cowl and tail unit. For the diorama buff there ENS Joe Gallano's Wildcat '29-GF-10' nose up next to the island on the Santee with its entire tail section torn off by the arresting cable. Photos and drawings of this unfortunate aircraft have appeared in many other publications, but this is the first to put a human face on this embarrassing incident.

As you can tell, I like this book a lot, both as an enthusiast of USN aviation and as a modeler. I have only one small regret: The author has made no effort to collect the serial numbers of the aircraft participating in Operation Torch. For the US aircraft, these should be available from the individual aircraft cards. Perhaps some Wildcat, Dauntless, or Avenger enthusiast has these. If not, maybe they are available somewhere in archives in Washington DC. An appendix of serial numbers would be a welcome addition to a second edition of this book - and certainly this book will deserve a second edition.

[Editor's note: A Publisher's Note in this book

states, "Hundreds of Army Air Force unit histories have been prepared since the end of World War II while only a handful of similar accounts are available for Navy and Marine Corps squadrons. Beginning with this volume we hope to produce the largely untold stories of Navy and Marine flyers enhanced with photos, art, many first person accounts and a recognition of enemy forces encountered, all in a unit history format." Great idea, Jack. I hope these book achieve the success they deserve.]

MIG-29, Przegląd Konstrukcji Lotniczych #6. 32 pages, 20.5 cm by 28.5 cm. Available from: Model Centrum (W.J. Gawrych), Nowowiejska 4m10, 00-649 Warsaw, Poland. \$7.99 plus 20% postage, payment by IMO or Banker Check (add \$7.50 towards bank conversion charges).

This monograph, with text entirely in Polish, will be of interest to most SAFO readers because of its illustrative content. Included are 44 b&w photos of both of full aircraft (including Iraq, East Germany, Bulgaria, & Yugoslavia) and close-ups of external and external details; 21 color photos of the cockpit, wheels and wheel-wells, and armament; 5 color side-view drawings (Polish, Soviet, Indian, Czech, & Iraqi); a 4-page 1/72-scale drawings including cross sections; and a 4-view drawings of Polish '70' with 'mermaid' squadron insignia. Printed on a good quality glossy paper, the quality of the b&w photos is good while that of the color photos is excellent.

Review copy supplied by Jaroslaw Garlicki (SAFCH #986).

Su-27, Przegląd Konstrukcji Lotniczych #6. 32 pages, 20.5 cm by 28.5 cm. Available from: Model Centrum (W.J. Gawrych), Nowowiejska 4m10, 00-649 Warsaw, Poland. \$7.99 plus 20% postage, payment by IMO or Banker Check (add \$7.50 towards bank conversion charges).

Identical in concept and execution to the MiG-29 book described above. This time, however, all the photos and drawings are of Soviet aircraft.

Other subjects in this series are: #1 Su-22M4, #2 Mi-24D, #3 I-22 Iryda, #4 F-117A, #5 B-24 Liberator, #8 Boeing B-52, #9 MiG-23MF, #10 Panavia Tornado, #11 Mirage 2000, #12 Uzbroyenie Lotnicze, #13 McDD F-15 Eagle, #14 SR-71 Blackbird.

SVENSKT MILITARFLYG - PROPELLEREPOKEN (Swedish Military Aviation - The Propeller Era), Lennart Andersson. 320 pages, 17 cm by 24 cm. lots of photos. Allt om Hobby, Box 90133, S-120 21 Stockholm, Sweden. price about SEK 290.

Contents: Marinens flygvasende (naval aviation), Flygkompaniet (army aviation), and Flygvapnet. History, development, training, unit histories, bases, aircraft, markings, tables of every aircraft and s/n. All piston-engined bomber/torpedo, fighter, and reconnaissance types and all trainers, ambulance and transport aircraft (plus gliders and sailplanes) until 1945 are covered. many tables, maps, etc.

[Editor's note: This book, by SAFCH member Lennart Andersson, is scheduled for publication by the time you read this. A detailed review will appear in a future issue, but, if you already know you want it, you can order directly from the publisher.]

FORNEBU 9 APRIL, Cato Guhnfeldt. 368 pages 22 cm by 30 cm. Hard bound, high-quality paper.

Wings Forlag A/S, 1990.

On 9 April 1940, when the Germans attacked Norway, the capture of the Fornebu airport, near Oslo, was an important part of the German plan. This book is about what happened at and around Fornebu that day, and about combat between a handful of Norwegian Gladiators and swarms of German fighters, bombers, and transports. However, the author does not restrict his attention only to events only on this day and in this location; he gives a broad background to events and provides much information on the Norwegian Air Force and on the German units participating in the assault. Interesting photos include several action shots and views of Norwegian Navy (ex-DNL) Junker Ju-52/3m on floats and Gladiators in camouflaged positions.

This is a tremendous book! Any superlatives would be an understatement. The author has gathered information from interviews with over 200 participants (German aircrew and paratroopers; Norwegian fighter pilots, ground crew, and others), from German and Norwegian archives, and from published sources. Everything is really "in-depth". The photo captions alone would suffice as the text for a "normal" book. The author is a journalist and a very good writer - once you pick up this book, you will not be able to put it down until you are finished. The Norwegian language will pose a problem to some, but if you're interested in Norwegian aviation, and, if you don't want to miss a really well-done and well-illustrated story, order this book now! Orders should be sent to: Postboks 2718, St Hanshaugen, N-0131 Oslo 1, Norway. (ISBN 82-992194-1-8) Price NOK 450 including postage to the USA.

Lennart Andersson (SAFCH #68), Tiundagatan 52B, S-752 30 Uppsala, Sweden.

HANSA BRANDENBURG C I, Sonderheft Nr. 20; 34 pages, hardcover. oS 60 including postage. OFH's newest title in their series of monographs is a detailed and comprehensive history of the Hansa Brandenburg C I. All types of C I's and their equipment are covered in text (in German), 4 b&w photos, 50 side-view drawings, and histories of individual aircraft.

Most of the drawings are of aircraft in Austro-Hungarian markings, but there are 8 drawings of aircraft in post-war markings: two are in the markings of the 1919 war between Austria and Yugoslavia (Karntner Abwehrkampfes) one Austria with a St. Andrew's cross on the tail and the other with a Yugoslav roundel (blue/white/red from outside); one in Italian roundels (1920); 2 Swiss CH-28 & CH-26 (1923); one Czech L-BARG (1926); and 2 Austrian A-85 (1930) and A-107 (1936). Yes, that right - 1936! A table list the HB C-1 that served in Austria from 1923 to 1938.

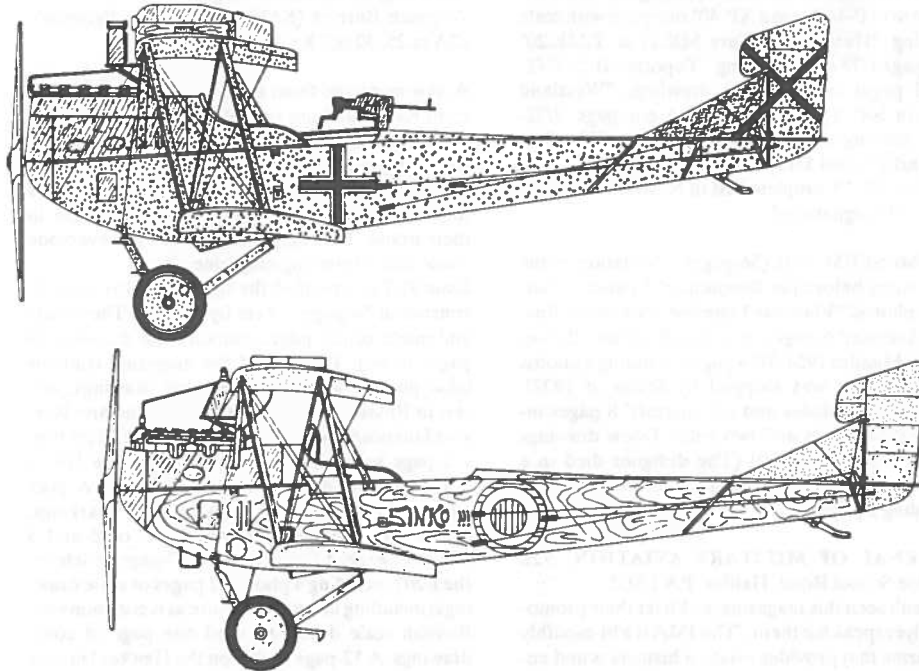
Order from: OFH, Pfenningeldgasse 18/2/14, A-1160 Wein, Austria.

THE INDEX, An Aviation Resource Index Cross Reference Guide, 810 pages. \$49.00. Patrick Martin, 812 East 55th St., Tacoma, WA 98404.

SAFCH member Pat Martin writes in the prefix to his gigantic tome: "This is the third time an aviation index has been created for myself. The first time a series of three by five inch cards were used. As the system grew to several cards per topic, I knew that it could not last in that form. The second system took the form of binder sheets. This took more than a couple of hours a month to keep up to date. Six three-inch binders later, this method became bulky and cumbersome to add and retrieve information from. The current product was entered into

a computer, resulting in near instant access on hard drive of any topic. An abundance of initial frustration, coupled with lots of data entry has resulted in this, my second book."

As an example of the type of data available and its arrangement, here are the entries for "SAFO" from the 216 entries (4 pages) Pat sent for review: "Indonesia - AF current - SAFO - 8104 - article - drawings"; "Indonesia - AF current - SAFO - 8110 - - drawings various"; "Indonesia - AF current - 8310 - - drawings"; "Indonesia - AF history - SAFO - 8401 - - drawings in post WW2"; "Iraq - AF current - SAFO - 9010 - article - drawings"; "Israel - AF marking - SAFO - 8207 - article - serial list insignia"; "Israel - modelling - SAFO - 8410 - article - by kit drawings var".



Entries are also made beginning with the name of the manufacturer ("Ilyushin" in the sample). From this small sample, there is no way to estimate the depth of cross referencing. Although the sample is limited, Pat seems to list most of the world's important aviation publications as well as decals manufacturers. "Every reasonable effort has been made to include 'indexable' sources of information. Some magazines, especially expensive continental European publications were dropped in the eighties due to the prohibitively high cost of subscription."

Besides the listing, there's a section giving a "brief and personal view of the sources used". I found Pat's comments on the history of ABT, AEROPHILE, etc. most informative and interesting.

"Reader should bear in mind this book is an expansion of a personal library indexing system, made originally with the sole intent of recalling information for historical and modelling research purposes. The method of indexing has worked for myself." Although this book looks expensive, considering its size it is not over priced. If the indexing scheme is to your liking, this would be a very good addition to your modeling library.

[Editor's note: Seems that I haven't started a good fight in some time. Let see what response this gets: I am not convinced that distributing an index on computer disk would not be better than converting it to hard copy. What do our computer experts feel

about this?]

"For SAFCH members living in Western Europe, buying Eastern European books in from the SAFCH Sales Service is like crossing the river to get to the water! No doubt US members are extremely happy about this opportunity, and rightfully so, but it would be much easier if we, who are living in Europe, could buy such books from a European source.

"As you are aware, England is the 'Mecca' for aviation enthusiasts and, not only for Europeans, but for enthusiasts from all over the world. Since you are not in the business of selling books for the money, but are interested in trading books for subscriptions, you might be interested in letting

your contacts 'over here' know that there is a bookshop in England, that I have been dealing with for over 20 years, that would welcome the opportunity to make commercial deals with any serious supplier of books. His problem is, of course, that he must know who to contact in his search for books. He is already selling quite a lot of Eastern European books, mostly from Poland, but also from elsewhere, where ever opportunity knocks.

"The bookshop in question is: The Aviation Bookshop (Beaumont Aviation Literature), 656 Holloway Road, London N19-272 3630. Owner/Manager: Dave Hatherall. Either let your contacts know about this bookshop or let him have access to publishers/dealers in the countries in question that publish books. I am sure there will be an increase in books sold, which is, after all, the point."

Stig Jarlevik (SAFCH #316), Grona Gatan 32, S-414 54 Goteborg, Sweden.

[Editor's note: I'm in complete agreement with Stig's comments - the point is to encourage the exchange of information about the small air forces. Since I do not deal directly with any publisher, all members (especially authors) who know struggling publishers should encourage them to write to reputable book dealers in England and the US. I can't imagine that this would harm our "exchange" program. Not many dealers will want to carry these "low interest" items (the Aviation Bookshop seems to be an exception) and those that do will not be able to match the prices asked by our members.]

"Let me introduce SAFO readers to two new magazines being published in the former USSR: (1) AIRPLANE COURIER, published in Beloruss, and (2) AIR MUSEUM, published in Russia. I am sending several copies of each so that you can share them with SAFO readers."

Igor Gordelianow (SAFCH #1066), ul. Strijskja 179 kw.68, Lvovskaja obl., g. Drogobych, 293720 Ukraina.

[Editor's note: Several copies of both of these magazines are available from the SAFCH Sales Service.]

AIRPLANE COURIER, 5/92 (12 pages). "Converting Novo's P-40B into a XP-40" one page with scale drawing. "Hawker Sea Fury MK.11 & T.MK.20" one-page 1/72-scale drawing. "Tupolev SB-2/ANT-40" 2 pages of 1/72-scale drawings. "Westland Wyvern S.4" 2 pages including a one-page, 1/72-scale drawing and 4 side-view drawings. "New kits by Starfix" (Bell UH-1B (1/48), HH-3E (1/72), & F-5E (1/72)). "Complete List of Novo Kits" "List of NATO Designations".

AIR MUSEUM, 1/92 (56 pages). "Aviation in the Tsar Army before the Revolution" 5 pages including 6 photos. "Vladimir Lebedev: Pioneer of Russian Aviation" 6 pages including 8 photos. "Soviet Cruise Missiles 1934-37" 4 pages including 4 photos (development was stopped by Stalin in 1937). "Alexandr Moskalev and his Aircraft" 8 pages including 10 photos and two color 3-view drawings (CAM-5-2 & CAM-10) (The designer died in a Siberian prison.). "War in Moravia: 1945" 3 pages including 2 photos.

JOURNAL OF MILITARY AVIATION, 528 Dunkle School Road, Halifax, PA 17032. I haven't seen this magazine, so I'll let their promotion flyer speak for them: "The JMA is a bi-monthly magazine that provides aviation historians and enthusiasts with the history, details, data, and photographs of their favorite aviation subjects. Contributors to the Journal include widely-respected aviation historians, writers, and photographers from around the world. Other works appear from fellow enthusiasts and new authors and photographers whose work has previously lacked commercial exposure but is, nonetheless, of interest to fans of military aviation. Each issue is printed on high-quality coated 8.5- by 11-inch stock and includes both award winning color and black-and-white photography. The cover is laminated for added durability and protection. A one-year domestic subscription is \$20.00. Overseas/International subscriptions are available for \$26.00 per year via surface mail or \$44.00 per year via air mail."

"Militaria #3 was issued in June of 1992 and, as usual, it has many excellent articles that will be of interest to SAFO readers. Of main interest to aviation enthusiasts is an in-depth study of each Soviet aircraft captured by the Poles during the Soviet-Polish War of 1919-20; in addition to many previously unpublished photos (24) there are color side-view drawings of a Soviet Re-8 & Sopwith 1 1/2 Strutter and a Polish Nieuport 24bis, and 11 side-view drawings of various Nieuports in Polish and

Soviet markings. Other aviation articles cover the Slovak Bf-109 with text, photos, and two large color side-view drawings, Bulgarian MiG-25 with two photos, and a colorful article on the 7th Special Aviation Regiment markings and colors 15 b&w photos, 13 color photos, and 11 side-view drawings (BSLim-2, TS-11, and An-2). A rather lengthy articles cover the restoration of the Camel at the Krakow Museum.

"Non-aviation articles include 'Armored Cars of the Russian Army 1914-1917', 'Armored Trains on the Eastern Front in WWII', and 'Polish Tankettes'. "A four-page English summary is included, making this a truly international magazine." Wojciech Butrycz (SAFCH #981), ul. Facimiech 12A m.25, 30 667 Krakow, Poland.

A new magazine from Russia (at least I think it's from Russia and not one of the other newly independent nations) is titled, in Cyrillic letters, with something that looks like AC. Since, those SAFCH members who have been brave enough to order this magazine "sight unseen" have been lavish in their praise, I thought I had better tell everyone about this interesting magazine.

Issue 91/2 is typical of the tree issues I've seen. It consists of 56 pages 17 cm by 25.5 cm. The covers and inside center pages contain color drawings (8 pages in all). The rest of the magazine contains b&w photos, scale drawings, tone drawings, and text in Russian. The articles in this issue are: Russian Hurricanes with 18 pages including 10 photos, a 2-page scale drawing of the Hurricane IIB, a one-page tone drawing (top, starboard, & port views) of Hurricane 'CU o 35' in RAF markings, and 4 color side-view drawings (FU o 56 and 3 red-star-marked Hurricanes). A 7-page article on the I-207 including 4 photos, 2 pages of scale drawings (including interior structure as is common with Russian scale drawings), and one page of color drawings. A 12-page article on the Hawker Harrier (second part) including 7 b&w photos, 2 pages of scale drawings (GR.3 & Sea Harrier FRS.2), 5 color side-view drawings (one Indian a/c), and a page of color drawings. The 2-page "center-fold" color 3-view drawing of a Soviet Il-2m3. There are also 2 pages of 1/72-scale drawings of the CK and CK-2 along with color drawings on the rear cover. The rear cover also has color drawings of the CAM-13 "push-pull" fighter and a twin boom assault glider, both of which were covered with photos and scale drawings in an earlier issue. There are also two article on Soviet aircraft with performance curves, but I wouldn't dare guess at a translation of the titles.

The quality of the line and tone drawings is excellent, but, because of the inferior quality of the paper used, the reproduction of the photos and the color drawings is only fair. However, this reviewer and all buyer have been knocked over by the uniqueness of the information provided. This series is highly recommended to anyone interesting in unusual Soviet aircraft. Only after I've sold the 12 remaining copies of AC 91/2 can I legitimately ask our Russian friends to send more recent issues.

PLASTIMODELISMO, The Magazine of IPMS-Ecuador. Just received from our friends at IPMS-

Ecuador is the first issue of their new magazine, PLASTI. Consisting of 24 pages 21 cm by 29 cm, this first issue has, unfortunately, nothing of small-air-force interest. The contents include: "El Bismark" 4 pages, "Aguila Capturada" 5 pages on building a diorama of a captured P-47. "Galeria IPMS" 3 pages of 22 photos of models. This magazine shows promise, so if you're interested, write: Plastimodelismo, Casilla 09-01-9901, Guayaquil, Ecuador.

Dariusz Kamas (SAFCH #999) writes about a new Polish magazine. "FANATYK PLASTIKU" (or in English, 'An Enthusiast of Plastic') is devoted to the modeler of plastic aircraft, vehicles, figures, etc. (we have no 'naval branch' as for now). We provide drawings, paint schemes, close-ups, detail views, and conversions for the modeler. Of course, we pay proper respect to history, but only to the degree needed by modelers. It is a private venture of hobby-shop owner, Marek Bronkowski, and the official address is: Fanatyk Plastik, ul. Slowackiego 4, 27-600 Sandomierz, Poland."

FANATYK PLASTIKU: Magazyn Modelarski. Issues 4 through 6 have been received for review. Most obvious is the rapid improvement in quality. The readability of the text has improved from unreadable in issue #4 (it looks as if it were typed with a worn-out ribbon) to fully type-set in issue #6. Issue #5 saw the introduction of a glossy, full color cover. The reproduction of photographs (first introduced in issue #5) is excellent. FANATYK PLASTIKU is now fully up to the standards we expect from non-commercial modeling magazines. A summary of the aviation-related articles in the issues at hand follow:

#4 (24 pages) "FW-189 Detale" one-page of sketches. "Me-210/410" 3 pages including 2 pages of drawings. "F-15 Detale" 2 pages of sketches. Color Chip: Sky Type S. "Tornado: cz. I" 4 pages including 6 side-view drawings of German Tornados. "Su-25K" one page on improving the KP kit. "Me-109G Napisy cd." 2 pages on stencil markings. "Sily Powietrzne Pakistanu" 2 pages on Pakistani Shenyang F-6 including 5 side-view drawings. "Samolot Asa" 2 pages with drawings of Ace Munchenberg's FW-190.

#5 (28 pages) "Fairey Seafox" 2 pages including 1/72 scale drawings. "Operation 'Granby'" 6 pages including 9 side-view drawings (RAF Tornado, Jaguar, & Buccaneer). "Su-27 Detale" 2 pages of sketches. "Tornado Kabina Pilota: cz. I" 3 pages on front cockpit detail. "Heinkel 179V1" 2 pages including 1/72-scale drawings. "Wegierskie Me-109" 3 pages on Hungarian Bf-109 including 8 side-view drawings. "Deutsches Museum: cz. I" 3 pages including 2 photos.

#6 (28 pages) "Mi-8" 5 photos of the Mi-8 in Polish markings. "Deutsches Museum: cz. II" 3 pages including one photo and a table listing the 91 aircraft at the museum. "Veltro" 3 pages including 2 pages of camouflage schemes. "Mig-23 Detale" 3 pages of sketches. "Tornado Detale" 3 pages on rear-cockpit detail. Color Chip: Mid Stone. "Tornado: cz. II" 4 pages including 12 side-view drawings of RAF aircraft. "TS-11 Detale" 4 pages of sketches.

INDO-CHINA AIRCRAFT

John MacGregor

CAMBODIA

When the Cambodian Republic collapsed in April 1975, the Khmer Rouge inaugurated their 'Democratic Kampuchea' regime using flag A. When Vietnam set up their client regime in Cambodia in mid-1979, a new, but similar, flag was adopted (flag B) for the country, which was then officially known as the 'People's Republic of Kampuchea'. This lasted until 1989, when the PRK was dissolved and reconstituted as 'The Cambodian State' (l'état de Cambodge). At that time, the flag was changed to flag C. Both flags A & B are red with yellow Angkor Wat silhouettes. Flag C is split horizontally, red over dark blue, still with a yellow Angkor Wat symbol, but note the difference in shape from that of flag B and the fact that the new symbol is much more detailed (detailing in black).

Since 1975, the national markings on Cambodian military aircraft of all three regimes has been the then-current national flag.

a. Khmer Rouge MiG-19 (actually a Chinese F-6). This machine is currently displayed at the Military Museum, Tou Samouth Street, Phnom Penh. It has been illustrated a couple of times in the SAFO, but neither scheme was quite correct. Overall natural metal, red codes, simple flag markings above and below wings, and slanted flag marking on the fin. The c/n 6-8837 (that's a Chinese character in front) is carried in medium blue on the nose-wheel doors. The red paint of the upper surface markings - flag and codes - has virtually disappeared (not surprising considering it's been standing outside in the Cambodian climate for 13 years), but the underwing markings and the yellow in the upper surface flags are still quite fresh.

b. Bell UH-1H. Overall olive drab. Upper surface of tail stabilizer and tail warning arrow are red. Nose panel black. Code 17-531 in white on both nose and fin, Flag B on fuselage sides. (This flag insignia now has a blue area added to make it resemble flag C, but I doubt if it ever flew with such markings.) The forward, narrow, cargo area doors are missing. No I/D plates of any kind are left on this machine, so it's impossible to identify this machine.

c. Helio AU-24. Overall medium green (not olive drab). Underwing weapons racks light grey. Flag B insignia under the wings and on the fin (not carried above the wings). The fin flag has been converted as above, but the underwing insignia is untouched. The code, 17-587, has virtually worn away, but can be seen to have been originally black and then repainted (in a slightly different position) in red.

The rudder and port-side pilots door are now missing. A constructor's plate on the port-side pilot's door frame gives the following information

MFR. HELIO AIRCRAFT CO.
A DIVISION OF GENERAL AIRCRAFT CO.
PITTSBURG FACILITY
PITTSBURG KANS.
MOD. HST 550A SER. NO. 012
DATE OF MFR. MARCH 1972
TYPE CERT NO. A4EA
MOD CERT NO. 311

One of these aircraft was illustrated in Khmer Republic colors (i.e. circa 1975) in SAFO #17.

The Huey and the AU-24 are in the children's play area at Boeng Kak Lake Park, Phnom Penh, and both are rapidly reverting to the status of wreckage. Both seem to have been there for at least three years - i.e. since before the change of flags. I wonder if the Khmer Rouge used them?

Incidentally, the MiG-19 and the T-28 (also illustrated in SAFO #17) are the only aircraft I've ever seen in Khmer Rouge markings, although various news reports also state that they also used C-47s.

INDO-CHINA MILS

a. Mil Mi-8, XU801, Cambodian AF, Pochentong Airfield, Phnom Penh, June 1992. Upper surfaces medium olive green (dark shading) and light grey, Undersurfaces light grey. (Is this the same color as used on the upper surfaces?). Codes black. Flag C insignia on fuselage sides. Rescue hoist above entry door, no doppler box below tail boom. XU802, seen at the same time, was in a virtually identical scheme.

b. Mil Mi-8, XU814, Kampuchea Airlines, also Pochentong, June 1992. Basically overall white. Main fuselage band, cheat line beneath it, and fuel tank dark blue. Note the entry door is outlined: blue on white areas and vice-versa. Upper fuselage/tail boom band is medium blue. Tail fin is dark blue with a type-C flag narrowly outlined in white. Nose area and area behind exhaust pipe are black. Airline titles and logo (see flag page, figure D for logo) dark blue. Codes black. No rescue hoist but it has a doppler box. The aerials above the rear fuselage are doubled.

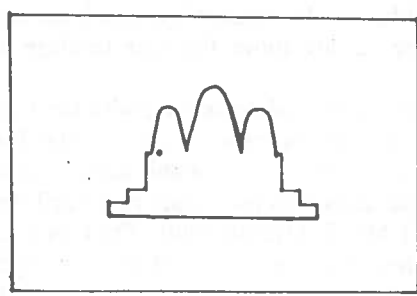
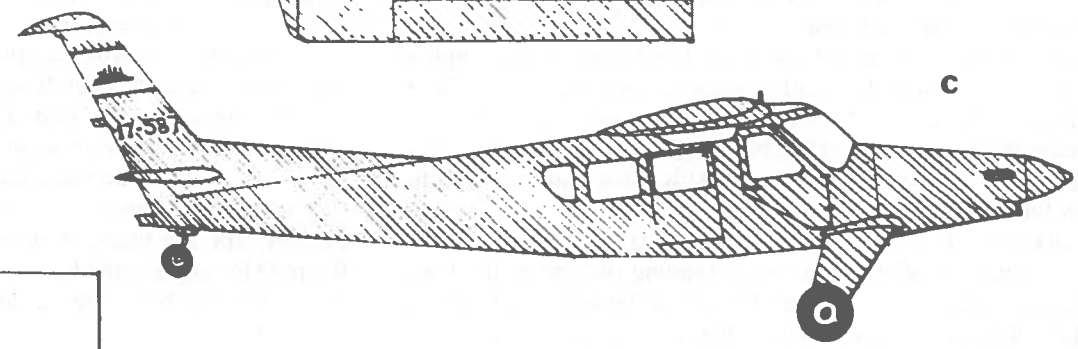
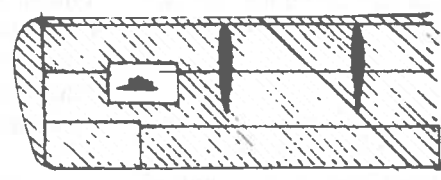
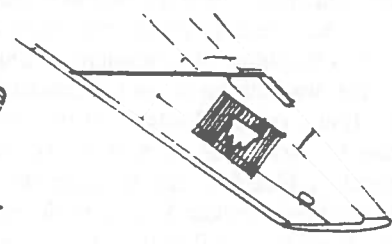
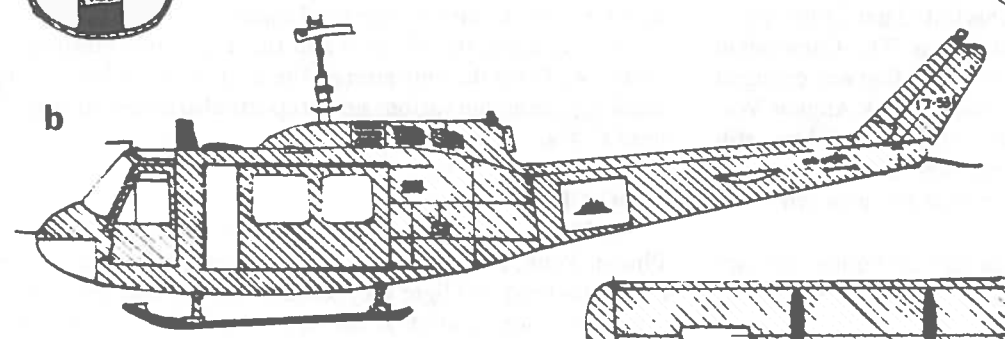
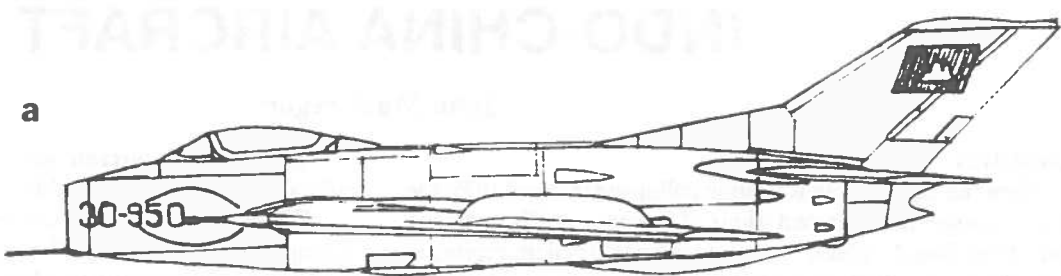
c. XU-814 in an earlier life, while serving with the Cambodian AF. Probably same color scheme as figure a. Flag B on fuselage side. Black codes. At this time probably carried rescue hoist. Source: Photo in Bangkok Post (newspaper), 8 April 1986.

d. Vietnamese civil Mi-17. Overall white. Dark blue tail boom band, fuselage cheat lines, area around forward engine intakes (the baffles for which are white), and nose area. Codes and titles are also dark blue. The titles read T.C. TYBAYDICH-VUVIETNAM (yes, it's all one word. Note the stress marks.) Band under fuselage as shown. Flag is red with yellow star. This helicopter was used for oil-rig support, so it probably carries a rescue hoist. Source: photos in VN Air Force Museum, Hanoi.

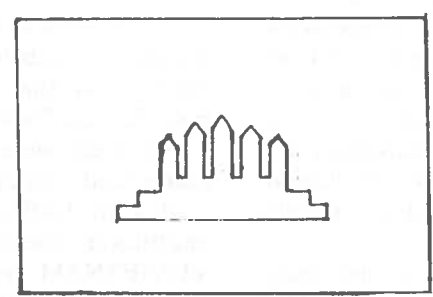
e. Vietnam AF Mil-18. Overall medium olive green over light grey. VNAF red and yellow 'star and bar' insignia on fuselage side. Yellow codes (3671). Seen at Tan Son Nhut Airport, Saigon, June 1992. (Sorry, I couldn't see if it had a doppler box.)

Also seen at TSN at the same time was a VNAF Mi-24A. Color scheme was medium olive green and a color I can best describe as a 'chalky', very light yellow-grey on the upper surfaces over light grey undersurfaces, red codes '3479' on the tail boom and the VNAF insignia in the same location as shown in e.

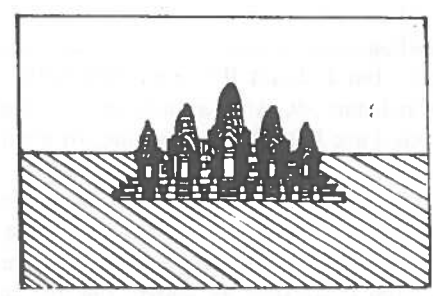
John Macgregor (SAFCH #766), 13 Foggyley Gardens, Dundee DD2 3LG Scotland.



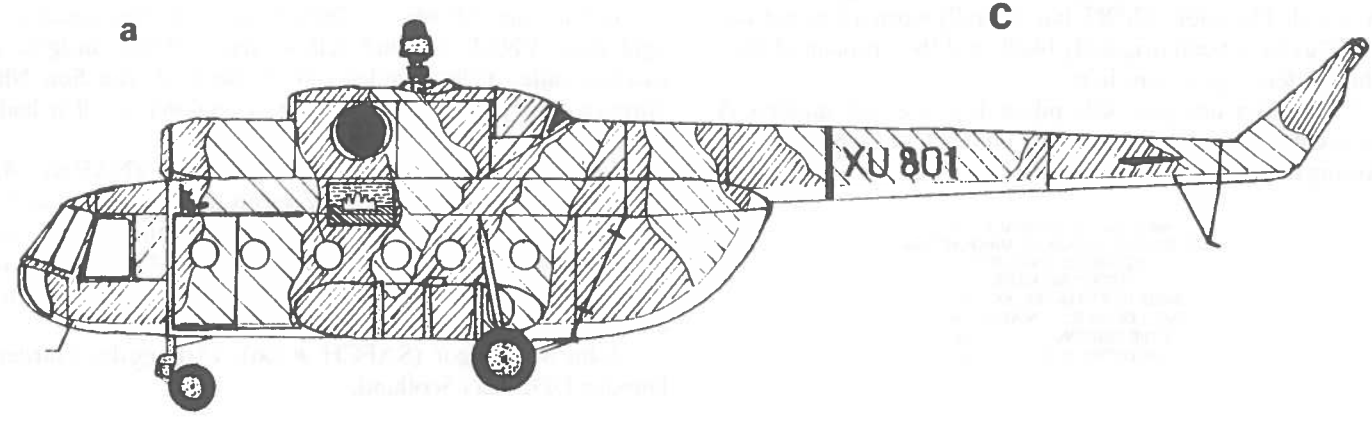
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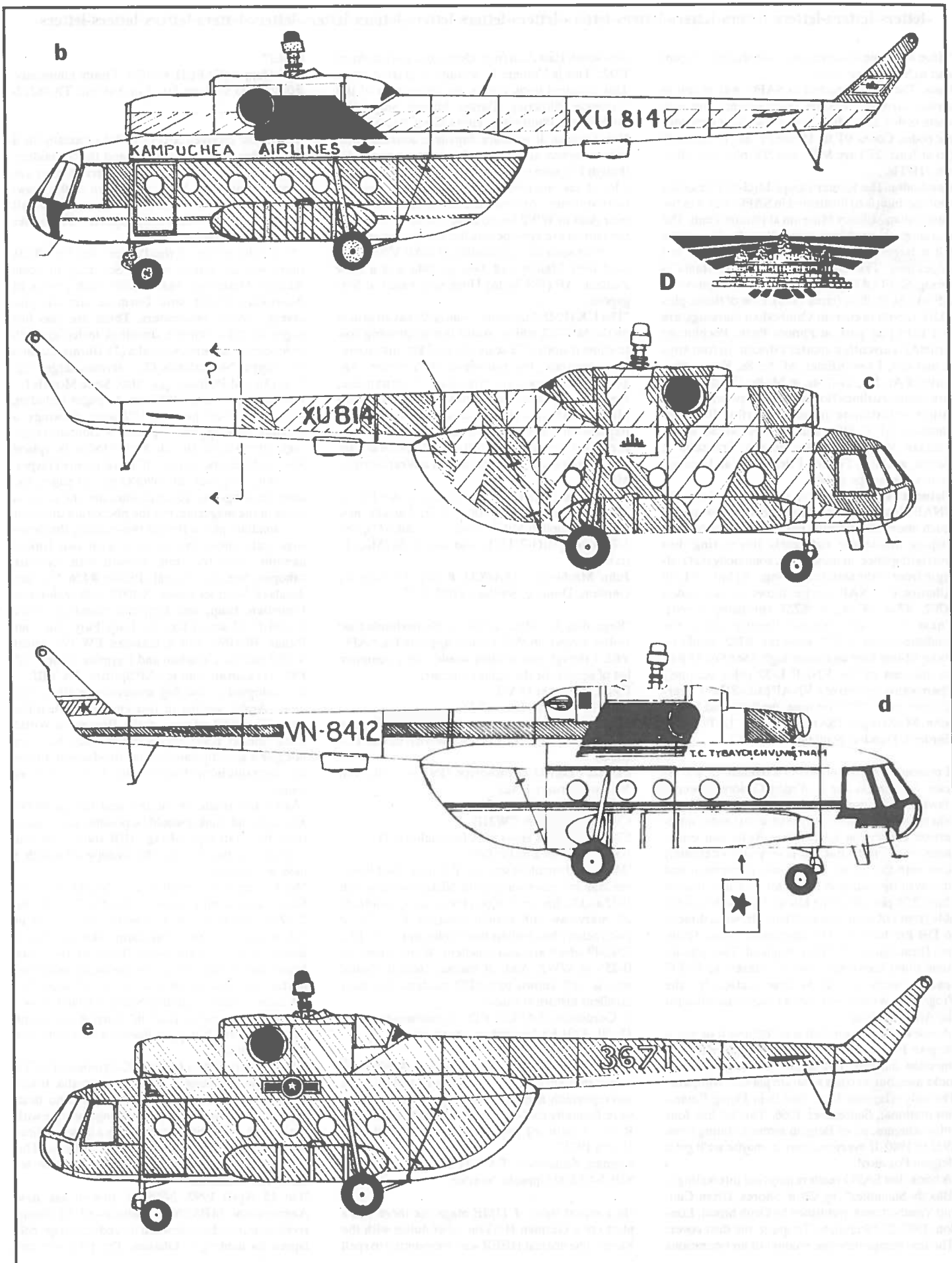


B



C





"Here are same observation made during a recent visit to South-East Asia:

Laos: The Mi-6 sketched in SAFO #41 is still in service carrying the same color scheme, but with white codes. Lao MiGs are overall light grey with red codes. Codes '01' to '16' are PFM's, '17' upwards (to at least '25') are MF's, and '12' plus one other are 21UTIs.

Cambodia: The Khmer Rouge MiG-19 (actually a Chinese-built J-6) illustrated in SAFO #24 is in the Cambodian Military Museum at Phnom Penh. The markings are as shown except that the flag on the tail is larger than shown and is not 'square' but slopes back. The scheme shown in 'MiG Mania' is wrong. SAFO #17 gave a scheme for a Cambodian AF AU-24 Stallion (circa 1973). One of these, plus a UH-1, both in current Cambodian markings, are in a kid's play park in Phnom Penh. Pochintong airfield is currently a spotter's dream: In four trips in and out, I saw Khmer AF Mi-8s; Kampuchea Airlines An-24s, Tu-134s, & Mi-8s; Cambodia International Airlines Boeing 737 (a new airline with rather unfortunate initials); Aerflot Il-76; Indonesian AF C-130s; and, in UN overall white, Russian Mi-17 & Mi-26, French Transalls & Pumas, a Dutch Fokker Friendship, and several small Cessna-type twins.

Vietnam: You've probably seen photos from the VNAF Museum in several magazine, so I won't say much about the aircraft. However, the photos on display inside are extremely interesting, but frustrating since, in most cases, somebody is standing in front of the serials/markings. A photo of L-39 Albatros in VNAF service shows aircraft coded '8702', '8708', '8714', & '8723' (probably in red). These codes are carried directly below the windscreen and in 1/72 scale the '8702' would be about 12-mm long and 5-mm high. (See SAFO #48 for the rest of the VNAF L-39 color scheme.) There's also a photo of a VNAF MiG-21UTI, overall silver, code '5905' on nose, probably red." John MacGregor (SAFCH #766), 13 Foggyley Gardens, Dundee, Scotland DD2 3LG.

"I remember seeing in SAFO a request for a 1/72-scale conversion for a Wright-Cyclone-powered Hawk 75A (as used by the RAF, the NEIAF, and others). DB Productions make a cast-resin nose-section conversion kit for this. Resin can sometimes mean crude, but this is very nice - delicately done with fine detail. It's an easy conversion and fits any of the available 1/72-scale P-36 kits. Price is about 2.75 pounds in the UK and it is widely available from UK mail order outlets. Or, write directly to DB Productions, 112 Chichester Drive, Quinton, Birmingham B32 1BB, England. They also do some other conversion bits of interest to SAFO readers, such as a H-34 nose section for the Frog/Novo Wessex and correct engine nacelles for the Airfix Hudson.

"A new kit from Aeroclub is of, believe it or not, a Belgian Fairey Firefly II fighter (1930s vintage). Injection molded, 1/72 scale. Accuracy? Well, it looks nice, but who has accurate plans to compare? The only reference I can find in *Flying Review International*, September 1966. The kit has four color schemes, all of Belgian aircraft, dating from 1932 to 1940. If everyone buys it, maybe we'll get a Belgian Fox also! •

"A book that SAFO readers may find interesting is 'Bloody Shambles', by Chris Shores, Brian Cull, and Yasuho Izawa; published by Grub Street, London; 1992; 27.50 pounds. To quote the dust cover: 'The first comprehensive account of air operations

over south East Asia from December 1941 to April 1942.' This is Volume 1 - Volume 2 to some later. This excellent book covers the entire area of the 'Japanese Blitzkrieg': Burma, Malaya, Singapore, the NEI, the Philippines, Hong Kong, Australia, & New Guinea. It includes Japanese sources, also. Where known, aircraft serials/codes are given. Although I've seen a lot of what's in it before, there's a lot of new material and it's all in one (or rather two) volumes. Anyone interested in the air war over Asia in WW2 has to have this book. Some of the photos are eye-openers include the only photo I've ever seen of a camouflaged RAF Vildebeest used over Malaya and Java in 1942 and a New Zealand AF (488 Sqdn) Hurricane based at Singapore.

"The UK IPMS Magazine, issue 3/92, has an article on the MiG-17, which, in addition to showing how to convert both 1/72-scale MiG-17 kits into something accurate, has side-views of Albanian, Angolan, Madagascar, Nigerian, Vietnamese, Egyptian, Cambodian, Syrian, & East German MiG-17s. There's also an article on the Spanish Republican Potez 54, including information on how to convert Heller's Potez 540 into a 542 (not as easy as it seems) and a color scheme for a West German MiG-29.

"Lastly, the current (July '92) issue of *Air Forces Monthly* has a color photo of Sri Lanka's new Chinese-supplied MiG's: four J-7s (MiG-21), one J-7 trainer (MiG-21UTI), and two JT-5s (MiG-17 trainers)."

John MacGregor (SAFCH #766), 13 Foggyley Gardens, Dundee, Scotland DD2 3LG.

"Regarding Jim Maas' article on Netherlands East Indies aircraft in WW2 which appeared in SAFO #62: I think our readers would like a complete list of serials for the fighter aircraft:

F301/306Fokker D-VII

C307/320Curtiss Hawk (P-6)

F321Fokker D.17 prototype (returned to Holland and was serialised 211 when its service ended in a crash)

FD322Fokker D.21 prototype (lost most likely in NEI in February 1942)

C323/342Curtiss Hawk 75A

CW343/366Curtiss CW21B

C367/394Curtiss Hawk 75A (not delivered)

B395/3166Brewster Buffalo

"Maas used excellent sources: P.C. Boer (not Bore) made an extensive study of the NEIAF up to March 1942 and he has written two books using hundreds of interviews with people involved. O.G. Ward (with other) has written two books on the NEIAF 1942-49 which are also excellent. Ward served on B-25's in WW2. And, of course, Gerard Casius, who is well known to SAFO readers, has done excellent historical work."

F. Gerdessen (SAFCH #12), Fijnscheerderstraat 12, NL-4204 ES Gorinchem, Netherlands.

"Concerning the Paraguayan Junkers A-50s mentioned in SAFO #63: I would like to add that one was reportedly named 'Nanawa'. It seems that both were formerly civil-registered aircraft (R-184 and R-191, I believe) imported from Argentina in March 1933."

Lennart Andersson (SAFCH #68), Tiundagatan 52B, S-752 30 Uppsala, Sweden.

"In a recent issue of *TIME* magazine there was a photo of a German H-53 on relief duties with the Kurds. The normal HEER was overpainted to spell

HELP"

Seth Gaines (SAFCH #1027), Trinity University, #00609, 715 Stadium Dr., San Antonio, TX 78212-7200.

"I have just received SAFO #62; I especially liked the articles on Dutch aircraft and the Skyraiders. Regarding the latter: Did these aircraft carry underwing roundels? None are shown in the drawings, or mentioned in the text, but French aircraft usually did and I would have expected her former colonies to follow suit.

"As for the review of the Pioneer Sea Fury T.20, there was an article on the Sea Fury in *Scale Aircraft Modelling*, March 1989, with photos of Australian, Dutch, and Burmese aircraft, plus several British two-seaters. There are also five pages of color scheme drawings including both styles of two-seaters: Australia (2), Burma, Canada (3), Egypt, Netherlands (2), German target tug, Iraq (2), and Pakistan (2). Also, *Scale Models International*, October 1983 has 12 pages including lots of close-up photos, 1/72-scale drawings, a cutaway drawing, and a photo of German target tugs; otherwise all British. *Scale Models Warplane Special*, 1982 (special one off 'extra' covers 11 types, including Yugoslav Bf-109G's) has 10 pages; the scale drawings and color profiles are the same as those in the magazine, but the photos are different (1 Canadian, plus a British two-seater); the drawings only show the version with two linked canopies, not the Iraqi version with separate canopies. See also *Aircraft Profile* #126. Ventura decals of NZ does a sheet V4807 (1/48 scale) with Canadian, Iraqi, and Egyptian markings. Sheet V7206 (1/72 scale) has the Iraqi Fury plus four Italian Bf-109's and a German FW-190. Sheet V7207 has the Canadian and Egyptian Furies, NZ F4U-1D Corsair, and RAAF Spitfire V & VIII. Iraq adopted a new flag sometime in 1991, with green Arabic writing in two groups between the stars. The 1992 edition of the *Britannica World Data Annual*, p.343, shows this in color, but does not give a specific date for its introduction. I have also seen this in the background of some TV news items.

"As for the article on the two-seat Kfir in SAFO #62, I should think it would be possible to use parts from the Matchbox Mirage IIIB trainer for this conversion, particularly the canopy, although I have not tried it.

"As for my letter published in SAFO #61, the Skyhawk in the bird strike belonged to 75 Sqdn; the RNZAF has never had a 74 Sqdn. Also, no one in NZ would ever say something like 'on North Island'. It is always 'the North Island' or 'the South Island' and things or places are always 'in' never 'on' the two main islands. Only in the case of the smaller off-shore islands, including Stewart Island, would a place be 'on' rather than 'in'. Sorry if this seems like a tiny point, but it just does not look right to a New Zealander.

"On 21 March 1992 a RAAF PC-9 trainer of 2 FTS crashed near Albany in Western Australia. It was being flown by two New Zealanders, who both ejected. The pilot was on an exchange posting with the RAAF, while his passenger was a liaison officer with the NZ High Command in Canberra. The latter officer was injured, the aircraft being a write-off. Serial unknown.

"On 15 April 1992, NZ6467, one of the new Aeromacchi MB339CB trainers of 14 Sqdn, received minor damage when its undercarriage collapsed on landing at Ohakea. The pilot was not

injured.

"At approximately 1125 hours on 23 July 1992, NZ6208, an A-4K Skyhawk of 75 Sqn crashed as an apparent result of an engine failure. Two aircraft were on a training flight when NZ6208 developed problems, and attempted to divert to Napier. However, the pilot was forced to eject some 8 km south of Cape Turnagain on the lower East Coast of the North Island. He landed on the beach, uninjured apart from some back pain, and was soon picked up. His aircraft was found the following day by an Iroquois search helicopter. It had crashed into the side of a hill burying itself deep into the ground. After the crash the flying program for the Skyhawks was postponed while the aircraft were checked over, but the Air Force emphasized that this was not a grounding (in bold type, and underlined, in the press release). However, the aircraft were soon back in the air. This is only the fourth RNZAF Skyhawk lost since they entered service in 1970, all lost aircraft being from the original batch of 14. None of the ten ex-RAN Skyhawks acquired in 1984 have been lost to date. The RNZAF now has 20 Skyhawks left, 15 single-seaters and five two-seaters; six are in Australia with 2 Sqn.

According to a small item in the New Zealand Herald newspaper for 5 August 1992, the Skyhawks were banned from flying over water after the crash because the emergency pack containing a dingy, survival equipment, and supplies, that was supposed to remain with the pilot, did not separate from the seat during his ejection, and the aircraft needed modifications to avoid this problem in the future. However, fortunately for Flying Officer Scott Armour, he came down on land and not in the sea.

"RNZAF Base Te Rapa, Hamilton, closed on 27 March 1992. Although a non-flying base, it had been home to No. 1 Stores Depot since 1943. Stores will now be held on each base, rather than being issued from a central point.

"On 17 July 1992, the Navigation, Air Electronics and Telecommunications Training Squadron (NATTS) disbanded at Wigram. The squadron had three ex-Air New Zealand Fokker Friendships (NZ2781/ZK-BXB, NZ2782/ZK-BXC, and NZ2783/ZK-BXD). Telecommunications training will now be ground based at No. 2 Technical Training School at Wigram, but a final decision on navigator training has not yet been made. This may now be done overseas, possibly with the RAAF or another military or civil contractor. The aircraft are being kept in short term storage at Wigram with just a small staff of about four to look after them, so that they can be reactivated in about a month if required.

"The RNZAF Museum at Wigram acquired a Cessna O-2A from the USAF Museum last year. Although the RNZAF has never had any aircraft of this type, it was flown by RNZAF pilots attached to the USAF as forward air controllers during the Vietnam war. Fourteen New Zealanders flew the O-2 and OV-10 Bronco with the USAF and 16 other flew helicopters with the Australians.

"The May 1992 issue of Air International has an article on the RNZAF including an historical section. Several minor errors, but the photos are really nice. One shows a pair of 14 Sqn Strikemasters with a small black circle on the fin, on which is a white Kiwi, just like the Canberra in the 1960's. I have seen this on the MB339, but not previously on the Strikemaster.

Paul Adams (SAFCH #773), 81 Ponsonby Rd., Ponsonby, Auckland 1, New Zealand.

"A couple of things from the April issue (#62): In regard to your query on the 'Yugoslav' use of the

MS406/410, codes 2301-48; these were, of course, the aircraft used by the Croatian AF. French Export Skyraiders: Cambodia - Air Enthusiast Quarterly #37 has the photo mentioned in the article, but it's quite small. However, it would seem that the colored tips to the tailplanes weren't carried by Cambodian A-1s, and the accompanying article in AEQ states that the fuselage band was red, outlined blue (in the same style as the then Cambodian flag). Does anyone know if these things carried underwing roundels?

"I loved Jim Maas' article on NEI colors, now all I have to do is repaint half of my kit collection. The P-40 with Dutch flags is also illustrated in "P-40 Hawks at War" from Ian Allen. Although I think it's currently out of print, it's bound to be easier to find than the Koku Asahi for Summer 1942.

"A few other minor points: For information on some of the new European air forces, have a look at the August issue of Air Forces Monthly. It's got articles on the Slovenian air arm (4 helicopters, color photos of all 4), Croatian AF including a b/w photo of their first MiG-21 and color shots of an An-2 and various UTVA types and also a color shot of a couple of Ukrainian MiG-29 whose roundel insignia carried a trident symbol not too different from the Ukrainian insignia shown on a Gotha GL-VII of 1919 in SAFO #24.

"In the same vein, a Dutch friend said that the Dutch TV showed a documentary on Lithuania that included a quick shot of a Lithuanian An-2 carrying the pre-war double-barred cross insignia on the tail, plus 'Soviet-style' codes in the fuselage - '23' he thought.

"Perhaps some of SAFO's new readers in the newly-independent countries can do some article on their new air arms. I'd love to see a Tupolev Bear in Ukrainian marks.

"I see that Blue Rider are apparently going to do a decal sheet for Siamese subjects. I wonder if they'll have any similarity to the sketches I published in SAFO?"

John Macgregor (SAFCH #766), 13 Foggyley Gardens, Dundee DD2 3LG Scotland.

"I just received a 1/32-scale resin kit of a US racing plane, the "Male R-2 Shark" from NKR Models of Czechoslovakia. The kit is quite complete with interior parts and a white-metal propeller. It sells for \$14.95 plus mailing and for a resin kit is a good buy." Jim Merrigan (SAFCH #857), 23 Maryland Ave., West Long Branch, NJ 07764.

"The article on the Chaco War in SAFO #63 rang some bells for me, and I dredged up the following information: The warship seen in photo 'n' on the back cover is the 150-ton Paraguayan river gunboat whose name was spelled either Tacuari (according to "Jane's Fighting Ships") or Tacuary (as given in Robert L. Scheina's book "Latin America: A Naval History 1810-1987, published by the Naval Institute Press in 1987). Built in 1910, it apparently was still afloat as late as 1941. According to Scheina, it was attacked by three Bolivian aircraft (he does not identify the type) on 22 December 1932 and may have shot one down.

"The Savoia Marchetti S.59bis in this photo was, according to Roberto Gentili (one of the aircraft's pilots), making its first test flight with new wings installed after damage in a crash landing in the Chaco Boreal. The same photo accompanied an article by Gentili in "1919-1939 Air Wars", June 1986."

Dick Layman (SAFCH #619), 50 Mohawk Ave., Corte Madera, CA 94925.

"In 'Dora Kurfuerst und Rote 13' Volume 2, there

is a photo of a Bucker Jungmeister captioned, 'Eine an die jugoslawische Luftwaffe im Jahr 1938 gelieferte Bu 131 wird während des Balkanfeldzuges repatriert!', i.e. a Yugoslav airplane repatriated after the Balkan war. Well, this caption is wrong. The airplane depicted is a Lithuanian Jungmeister repainted with modified Soviet insignia after the occupation in 1940. If I remember correctly, the outer ring was red, the inner ring was green, and the star, of course, was red. The lettering on the turtledeck reads in Lithuanian, 'Attention! When pushing back disconnect tailwheel.' The number visible is 801; Lithuanian Jungmeisters had been numbered 801 through 806. This just shows that even the experts can be wrong."

David Dulaitis (SAFCH #913), 417 Preston Circle, Sunny Hills, FL 32428.

"I agree with your comments in SAFO #63 about the need for native English speakers to review English translations by non-native speakers. However, I suggest a modification to your guidelines; the editing 'price' should be both a written acknowledgment for the editing work in the publication and an autographed courtesy copy of the publication. I would be pleased to edit for that 'price' and ask that you add my name to your list of volunteer editors. I occasionally provide technical editing and review services for a number of authors and would be pleased to offer my services to foreign authors and publishers as well. (By the way, I've just completed a technical edit of David F. Brown's forthcoming book 'War Paint' (working title) about the aircraft and markings in the Gulf War. This book will be of interest to small air force aficionados since it includes color photos of many small air force aircraft, e.g. Saudi Arabia, Oman, Kuwait, Bahrain, and Iraq.)

"You asked 'What is a Bell 214 anyway?' in your review of the Squadron/Signal 'UH-1 in Color' book. The short answer is that it's a Bell 212/UH-1N on steroids - a bulked up Twin Huey, capable of carrying 18 passengers. The 214 was developed in response to an Iranian military requirement. Bell delivered approximately 100 Model 214s to Iran (obviously before the Shah's exit from Iran and the subsequent downturn in US-Iranian relations). The 1989-90 edition of 'Jane's All the World's Aircraft' notes that other military 214s went to Brunei (1), Iraq (45), Peru (11), Thailand (9), and Venezuela (4). The Bell 214ST (ST for Super-Transport) is the current production version and is aimed primarily at the civil market. The Peoples Republic of China acquires a number of 214STs in 1989-90, some of which may have gone into service with their military forces.

"A quick update on my current writing projects - my OV-10 Bronco monograph and the A-4 Skyhawk in Action book, plus two new projects. Both Dan Petz (SAFCH #623) and Paul Adams (SAFCH #773) continue to provide strong support for both projects.

"I first came across the 'New Zealand connection' to the Bronco in Marshall Harrison's autobiographical account, 'A Lonely Kind of War: Forward Air Controller, Vietnam' (Presidio Press, 1989). Unfortunately, Harrison changed all the names in his book '... to protect the anonymity of the people involved'. Paul confirmed that RNZAF pilots flew USAF OV-10s in Southeast Asia (he provided a copy of an official history that listed the names of all 14 RNZAF pilots who flew in O-2s and OV-10s with the USAF).

"The Germans withdrew their OV-10B and B(Z) from service in 1989 and are trying to find buyers for them now. (At least one former German Bronco has gone to an aviation museum in France.) The

Bronco has also completed USAF service and will complete its 'hitch' with the Marine Corps during FY 1995. A number of former USAF OV-10As are in the Foreign Military Sales (FMS)/Military Assistance Program (MAP) pipeline. For example, the Philippine Air Force should already have received 24 Broncos to replace their T-28Ds. Published reports indicate that surplus Broncos will also go (or have already gone) to Chile, Ecuador, Peru, and Venezuela. A number of ex-USAF OV-10s have also gone to the 'small air forces' of other US Government organizations outside the military: NASA has at least one and the Department of the Interior has apparently received several. I could use the help of any SAFCH members who can supply 35-mm color slides (preferably Kodachrome) and information on the Broncos in small air force service. I am still looking for good slides of Broncos in German, Indonesian, Moroccan, Philippine, Thai, Venezuelan, NASA, and Department of Interior service. I will trade 35-mm Kodachrome color slides or 8 x 10 color or black and white prints of contemporary US military or airlines for Bronco slides. All who contribute will be acknowledged and properly credited for all photos published. Publication of the Bronco monograph is scheduled for the last half of 1993.

"Dan Petz has been my sole source of information on Israeli Skyhawks to date. However, I still need slides or photographs of the ex-USN/USMC A-4Es, A-4Fs, and A-4Ms in IDF/AF squadron service. Photos of the IDF/AF's A-4Ns in Israeli service are also required - surely some SAFCH member can help? Paul Adams also provided information on a new line of decals, Kiwi Colours (distributed by Trevor Bringans Ltd, P.O. Box 75-156, Manukau City, Auckland, New Zealand, price unknown). The instructions show the current 'lizard' camouflage scheme for the RNZAF's TA/A-4K aircraft. The decal sheet, covering both 2 and 75 Squadron, has enough decals for six models. It also includes complete serial blocks for 20 (out of 24) RNZAF aircraft. I still need information and slides of the Skyhawk in squadron service with the military services of Israel, Indonesia, current Argentina, New Zealand (TA/A-4K Kahu updates), and Singapore (TA/A-4S Super Skyhawk versions).

"I am also working on two other projects that will have some small air force interest - books on 'Army and Air Force Serial Numbers, 1946-1994' and 'Navy and Marine Corps Bureau Numbers 1946-1995'. These books will be similar in format and concept to the volumes published by Merseyside Aviation Society in the 1970s. They will include the designations and US serial number identities for aircraft acquired by foreign governments through the US Foreign Military Sales and/or the Military Assistance Program. Again, the assistance of SAFCH members will be vital to the success of these books."

Bob Mills (SAFCH #139), 2412 South 9th St., Arlington, VA 22204-2302.

"I found the article on the Chaco War in SAFO #63 most interesting. However, the statement that, in 1934, the Paraguayan Macchi M-18AR conducted the first night bombing mission in Latin America is incorrect. The first night bombing mission in Latin America occurred in Mexico during the DeLa Huertista rebellion of 1923-24.

During the daylight hours of Sunday, 3 December 1923, a Mexican Air Force Morane-Saulnier MS.35 parasol trainer, flown by Alfredo Lazama with David Borja as observer, conducted a aerial reconnaissance mission over rebel positions in around Barca and Ocotlan. Later that night, they returned to Ocotlan with bombs, no doubt carried by the observer. They first dropped flares to illuminate their targets and then dropped the bombs on the rebel positions. Heavy damage was reported.

This feat of arms was reported directly to the President, General Alvarro Obregon, by the commander of the region, General J. G. Escobar. An article on this was published in the December 1923 issue of the aviation magazine Tohtlif and in a newspaper account dated 25 December 1923. Copies of these two reports are included for the SAFCH files."

Santiago Flores (SAFCH #588), PO Box 430910, San Ysidro, CA 92143-0910

"I would like to add to the article in SAFO #63 on the origins of Mexican AF serials and prefixes. These instructions were part of the plans of General P. A. Gustavo Salinas Canina, Chief of the Mexican Air Force 1942-1946 (his second tour in this office). He envisioned a 1000 plane air force for Mexico, of which 600 were to be combat aircraft (300 medium bombers, 150 attack bombers, and 150 fighters) and the rest were to be non-combat aircraft (300 trainers and 100 transports & liaison). These aircraft were to come from lend Lease and from the purchase of surplus aircraft after the end of the war. This force would be manned by 2000 trained pilots.

"The type of aircraft General Salinas intended for the post-war Mexican Air Force were as follows. Transports: C-60 & C-53; Liaison: L-5 and helicopters; Bombers: B-25, A-26, & B-17 (General Salinas wanted only enough heavy bombers to train one squadron of pilots in 4-engine aircraft); Dive Bombers: A-24 & A-25; and Fighters: P-51 & P-47. In spite of receiving tentative approval from the Secretario de la Defensa Nacional, this plan was never carried out.

"Some of the reasons for the failure of this plan can be traced to the the lack of support for the Air Force after the war was over. However, I came across another reason while doing some research at the National Archives in Washington, D.C. Documents written by the US Military Attache in Mexico City, reveal the following story. Early in 1945, General Salinas, on the recommendation of the USAAF, tried to remove Col. Antonio Cardenas Rodriguez from command of 201 Squadron, which at that time was in training in the US. General Salinas did not give any reasons for his

actions nor did he listen to the other side of the story. Colonel Cardenas hurried back to Mexico City and went directly to the President, General Manuel Avila Camacho, to explain his side of the story. As a result of this conference, President Camacho ordered that Col. Cardenas be reinstated as Commander of the 201 Squadron (which later became the MEAF).

"It appears that this incident created ill feelings between the President and General Salinas, and, in 1946, General Salinas was replaced as Chief of the Air Force by (now) General Antonio Cardenas. General Cardenas did not continue General Salinas' planned expansion. Quite the contrary, General Cardenas' main concern was the keep the Air Force flying on limited budgets which would plague his entire time in office.

"Concerning the prefixes not mentioned in the article:

"EA (Entrenador Avanzado): used for the AT/T-6 Texan; this system is still used for the Pilatus PC-7 trainers.

"EB (Entrenador Basico): basic trainers such as the Vultee BT-13/15 series.

"EP (Entrenador Primario): primary trainers such as the Fairchild PT-13 which is still in use alongside the Mudry CAP 10 at the Aviation School (Zapopan Jalisco).

"Currently, some aircraft have discarded the use of prefixes: The Northrop F-5E and F-5F carry only a four-digit number, and those Pilatus PC-7's assigned to the tactical Squadrons carry only a three-digit number (their school counterparts still carry prefixes). The C-130A Hercules transports also carry no prefixes.

"Other prefixes have changed:

"TT as used on transports such as the C-47's has been changed to ETM Escuadron de Transporte Mediano (Medium Transport Squadron).

"TC has been changed to ETP Escuadron Transporte Pesado (Heavy Transport Squadron) for the C-54, DC-6, and C-118.

"Other prefixes are no longer used. For example:

"BM: Bombardero Mediano (Medium Bomber) was used on the three B-25J Mitchells, and there are unconfirmed reports that these bombers also used the prefix BLM Bombardero Ligero Mitchell (Mitchell Light Bomber).

"This is an interesting and complex subject. However, most of the problems probably are the result of unofficial deviations from the rules and regulations."

Santiago Flores (SAFCH #588), PO Box 430910, San Ysidro, CA 92143-0910

"In SAFO #63 in your abstract of the Hungarian magazine AERO HISTORIA you incorrectly identified the aircraft in the background of a photo as a Si-204. The Si-204 was never exported during WWII. The aircraft in the photo is an Hungarian Junkers Ju-86."

Matthias Rothe (SAFCH #865), Ringbahnstr. 72, 1000 Berlin 42, Germany.

Polikarpov I-3, injection-molded, 1/72-scale kit. Coming as a complete, but welcome, surprise is this Latvian-made, injection-molded kit of the between the wars (i.e. the two World Wars) Polikarpov I-3 biplane fighter.

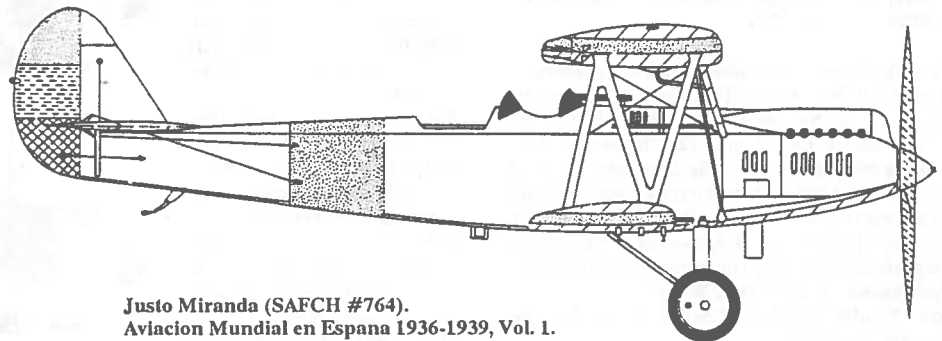
The I-3 is molded one one frame of soft, white plastic in a style and quality that is very reminiscent of the Huma kits - high praise, indeed. The molding is very clean, with just a touch of flash. The incised panel lines are straight and clean and the wing-rib detail is suitably subdued. The locating holes for the struts are well defined and all the struts appear to be useable. The cockpit interior is simple (as was the original) with a floorboard, seat (the poorest molding in the kit), control stick, rudder pedals, and instrument panel with well defined gages and switches. The only imperfection I can find is a sink hole on the back of the underslung radiator, but this is easily filled. The windscreens is clear but so tiny you'll probably lose it.

The decals are the poorest part of this kit: The white-outlined red tail numbers ("3" and "4") are badly out of register and the red stars with the black outline and inscribed black circle look crude (maybe they are supposed to that way0, but the white lightning flash is useable. The instruction sheet is minimal, but sufficient. The exploded views have the parts numbered, but there are no numbers on the frame. (I'm still looking for parts #23 navigation light I believe - they don't seem to be on the frame.) A 3-view color drawings gives the paint scheme (olive drab over blue with natural metal cowl) and placement of the markings.

The Latvian Polikarpov I-3 is an excellent kit by any standard. The SAFCH has a small number of these kits on hand, so order quickly, or you'll have to wait until the second batch I've already ordered gets here. The instruction sheet announces that the second kit will be the Antonov I-4 sesquiplane fighter.

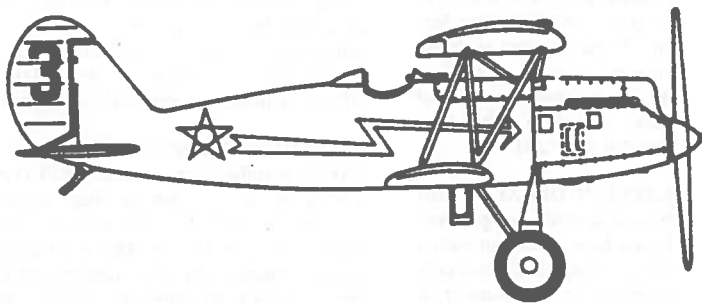
wise well-represented radiator screen will require covering with wire mesh.

The instruction sheet is totally inadequate; just one exploded view with no other drawings. To align the wings and landing gear, you'll need a good three-view drawing. There's a good one in the MPM vacuform kit of the R-5. Also, the first volume of "Aviacion Mundial en Espana 1936-1939", by Miranda and Mercado, has an excellent 3-view drawings and color schemes for three Spanish Republican aircraft. The decals in this kits are excellent consisting of dry transfers with neatly printed red stars and the numbers "1", "2", & "3". The Polikarpov R-5 is an excellent kit that is spoiled only by inadequate instructions. As with the kit of the I-3, the SAFCH has only a small number of these kits on hand, so order quickly, or you'll have to wait until the second batch I've already ordered gets here.



Justo Miranda (SAFCH #764).
Aviacion Mundial en Espana 1936-1939, Vol. 1.

PIPER L-4, 1/72-scale, injection-molded kit. KP. Available as two separate kits, one on wheels and one one floats. The wheeled version has 41 parts (plus 4 clear parts) on two frames. The parts fit



Polikarpov R-5, injection-molded, 1/72-scale kit. This Russian-made kit has a lot in common with the I-3 kit reviewed above. It too is cleanly molded in a soft, white plastic with neatly inscribed panel lines. However, in this kit, the wing-rib detail is inscribed, but this will not detract from the appearance of the model. There's also quite a bit of flash, but it will clean up easily and the struts are commendably thin and the locating holes are sharply delineated. I don't like the separate control surfaces, but this is a personal prejudice. The interior is necessarily simple consisting of a floor board, a poorly-designed seat and instrument panel, the gunner's compartment, and a gun that is best replaced by an AeroClub product. There's a little bit of shrinkage on the landing-gear shock absorbers that is easy to fix, but a large sink-hole in the middle of the other-

together well, but care is needed when fitting the one-part wing to the cockpit transparencies. The decals are far and a way better than past KP decals; they are sharp, matt, and overall very good. Markings are provided for a camouflaged US Artillery Field Corps plane (44-79676, '39-F') at Normandy and two Czech planes, one camouflaged (#26) and the other silver overall (#10).

The float version is identical except for the floats. The water rudders are not provided but these are easily scratch built. Markings are provided for two planes: one USAF '9206' and a Polish 'SP-AFY', both are silver and red.

I recommend the use of Eduard set 72-027 with both of these kits.
Vladimir Stepanek (SAFCH #829), Na Vinici 458,
274 01 Slany, Czecho-Slovakia.

"The following information about new (not Novo) 1/72-scale kits being produced in Russia, Ukraine, and Beloruss by newly independent factories should be of interest to SAFO readers.

*Injection molded - ALFA (Moscow): MiG-3, Su-2, BB-22/Jak-4. KEMZI (Kijev): I-16 type 24. ALFA-2 (Moscow): LaGG-3, Jak-6. Hobby (Moscow): Jak-7, Jak-15. Patriot (Voronez, Russia): Su-4, M-5. Polytechhik (Rostov, Russia): G-11 assault glider. Energia (Lvov): Modern Soviet Aircraft Weapons Set. Modeller (Moscow): Bi-1. Universal (Samara, Russia): Bi-1. Star (Donietzk): Jak-9 (1/48 scale). Fakel (Odessa, Ukraine): MiG-3. Vacuum - Kayuk (St. Petersburg, Russia): I-185, I-2bis, I-3, I-4, P-63 Kingcobra, La-15, Space Aircraft 'Burán'. K&K (ex-Kotep, Moscow): MiG-29, Su-27, Su-15TM, A-4 Skyhawk, FW-160A-5/A-7, Bf-109E, Ki-61-1, A6M Zero, F-117 Stealth

Fighter. Aviastrand (Kharkov, Ukraine): La-15, UT-2, Jak-32, MiG-133/I-250. Uyt "Cosy" (Kiyev, Ukraine): Su-15, Su-24, Su-27, MiG = 23, MiG-25, MiG-27, Jak-38. Starbirds (Bryansk, Russia): Su-100/T-4, Me-110, Me-410, Brewster Buffalo, Me-262A, Ki-15, AT-6 Texan."

Igor Gordelianow (SAFCH #1066), ul. Strijskaja
179 kw.68, Lvovskaja obl, g. Drohobych, 293720
Ukraine.

"I would like to present to our readers a new company: **Warrior Models**, (address: ul. Kozański 75/16, 54-152 Wrocław, Poland). They produce a variety of model accessories and metal figures in a variety of scales. Enclosed for your review are: (1) Accessory set for the Mastercraft TS-11 Iskra. This consists of a decal sheet for two Polish and one Indian AF machines, a resin-cast instrument bay for the nose, a vacuformed canopy, and white metal gun barrels, front wheel, and a detailed jet engine. The instruction sheet includes 1/72-scale drawings. (2) A 1/48-scale white metal figure of Col. Tomb, the North Vietnam AF ace.

"Their list of products is too extensive to include in SAFO, but it includes 1/72 scale vacuform kits of the HF-24 Marut, Curtiss P-40M, and Nanchang Q-5 (with metal parts and decals); 1/48-scale vacuform kits of the LaGG-3 and Su-6 (with decals); metal ejection seats in 1/48 scale (MiG-21, MiG-23, MiG-29, etc.); resin engines in 1/48 scale; 1/35-scale diorama accessories (posters and ruins); and a most welcome diorama accessory set in 1/72 scale which includes ruins, wall, well, etc.).

"Future releases include the PZL P-23 Karas and IAR-80 in 1/48 scale."

Wojciech Butrycz (SAFCH #981), ul. Facimiech
12A m.25. 30 667 Krakow, Poland.

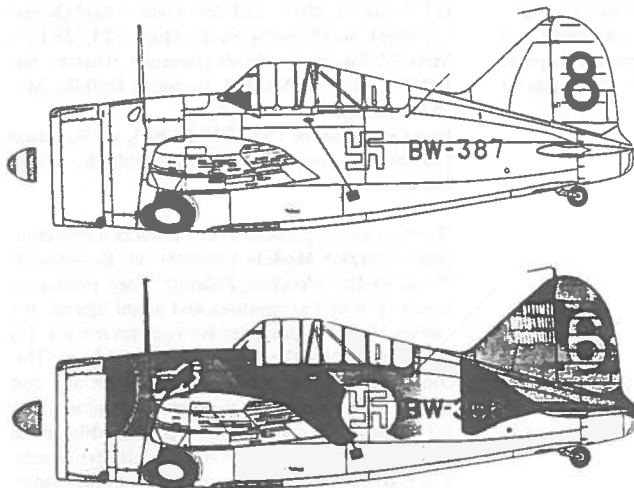
The French firm **Carpena** has some new 1/72-scale decal sheets that should be of interest to SAFO readers: 72/41 Armee de l'Air 1940-42 (Vichy Potez 631 & 63.11, LeO 451, D.520, & MB.152) 50FF; 72/42 Vichy Aeronavale 1940-42 (Martin 167F, three D.520, & LeO 451) 50FF; 72-43 MiG-17 includes resin nose for KP kit (Angola, Cambodia, Madagascar, Mocambique, & North Vietnam) 65FF; 72-44 MiG-17 includes resin nose (Nigeria, Sri Lanka, two USSR, & Polish Lim-6R) 65FF; 72-45 MD.450 Ouragan (four France, India, & El Salvador) 50FF; 72-47 P-51 (RAF, USAAF, France, & Haiti) 50FF; and 72-48 P-51D (RAF, USAF, France, & Somalia).

Model Art also has some interesting new sheets at 4.20 pounds each: 72/012 Mystere IVA (three France & two Israel) and 72/013 Sea Hawks (four RN), Pilatus PC-9 (Saudi Arabia, Swiss, & Australian), Sea King (Norway).

[Editor's note: This information is from the IPMS-SWISS Newsletter 2/92.]

"The Hi Decal line has added several new sheets to their 'Gulf War' series. The recent additions are: 72-007 on the SA 341/342 Gazelle, 72-009 on the F-15E Strike Eagle, and 72-010 on the A-10 Thunderbolt II. The Gazelle sheet should be of interest to SAFO readers as it covers seven aircraft of no less than six countries: 2 RAF, France, Iraq, Kuwait, Egypt, and Yugoslavia. The quality (registration, printing, color, etc.) is excellent. Future releases in their Gulf War series include the MiG-21, MiG-23, MiG-27, Su-24, Mirage F-1, and Puma/Super Puma."

Wojciech Butrycz (SAFCH #981), ul. Facimiech 12A m.25, 30 667 Krakow, Poland.



InScale 72: Pentti Manninen, Makelankatu 5B10, 00550 Helsinki, Finland.

Our Finnish friend (and SAFCH member) Pentti Manninen has just released five new sets of decals: AC005 Fiat G-50 in Finnish AF Service 1939-1944; AC006 Brewster 239 in Finnish AF Service 1940-1942; AC007 identical to AC006 but in 1/48 scale; AC008 Ju-88A-4 in Finnish AF Service 1943-1944; and AC009 Brewster 239 in Finnish AF Service 1943-1948.

Those of you familiar with InScale decals will know that their subjects are authoritatively researched and that the instruction sheets are exceptionally complete and informative. The decals themselves are superbly printed in accurate colors to perfect

register and include extensive stenciling and other small markings. These new sheets are every bit as good as Pentti's previous releases.

The G-50 set includes markings (serials, tail codes, squadron insignia, victory markings, etc.) for 9 aircraft and national insignia and stenciling for two aircraft. The set for the early Buffalos (or is it spelled Buffaloe, Dan) provides markings for seven aircraft (one silver overall, the others black/olive green over either silver or light grey) and national insignia (on white or silver background) for three aircraft. The Ju-88 set provides markings for 8 aircraft and national insignia (on white and light blue background) for two aircraft. The set for the later Buffalos includes markings for 10 aircraft (including the VL Humu prototype) and national insignia (on white, on light blue background, as well as roundels for a bare-metal "staff flight" aircraft) for three aircraft.

These sets, as well as the earlier 1/72-scale sets (AC001 Bf-109G-2, AC002 Bf-109G-6, and AC004 Fokker D-21 are available from Finland (at the address above) for US\$ 6.00 for the 1/72-scale sets and US\$ 9.00 for the 1/48-scale set. This price includes air mail delivery. Please pay by cash or IMO (do not send cheques because of excessive bank charges).

[Editor's Note: For an independent evaluation of the Buffalo sets, see Jim Maas' article elsewhere in this issue. A small number of these sets (as well as some of the earlier InScale sets) are available from the SAFCH Sales Service. If the demand is strong enough, I'll order more of all of these from Pentti, but please expect to wait a long time for delivery.]

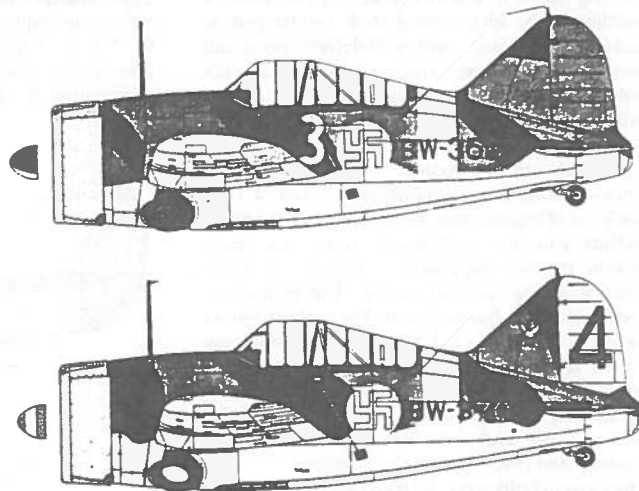
LATVIAN DECALS: Our friends in newly-independent Latvia have come out with a line of decals that is not only extensive in the number of subjects available but the quality of the decals is very good. While most sheets lack small-air-force subjects (B-17, Lancaster, A-4, F-4, P-38, P-61, F6F, TBM, Tempest, Wellington, Buccaneer, BAC Lightning, Me-110, Ju-78, Bf-109E, FW-190A), others include at least one unusual scheme (Indian Hunter, RAAF Spitfire VIII, RN Pacific scheme Firefly, Croatian Bf-109G, Finnish Buffalo, Soviet A-20, P-47B, & P-47D), and a few are predominately small air forces (Thai & South Vietnam Bearcats; Iraqi, West German, and Iranian MiG-29; Brazilian and Iranian F-5E).

The sheets are of various sizes. The most expensive measure 13 cm by 17 cm, the medium=prices sheets 8 cm by 14 cm, and the least expensive 6 cm by 8 cm. The quality is good; the printing is sharp, the colors usually accurate (an exception is the dark blue used for the national insignia for the Finnish

Buffalo), and the registration excellent. Almost all sheets include decals for the instrument panel, side panels, and extensive stenciling. The instruction sheets are very brief, but usually adequate except that top views are seldom provided. Surprisingly, two sheets are without any instruction sheet (MiG-21 with Soviet stars, black outlined yellow numbers 0-9, and stenciling; and MiG-29 as described above).

In summary, these well-reproduced decals offer an interesting variety of subjects at an outstandingly reasonable price.

[Editor's note: The first Latvian member to send



these decals did not specify prices, so I set what I thought was a fair price. Then I received a batch from a second member asking significantly higher prices. Since I do not lower any prices without first asking approval, I raised all prices. Then, the first member sent a second batch with prices listed that supported my initial values. I have, therefore, reduced prices on the decals provided by the second member. When these run out, prices will go up unless the second member agrees to the lower value. Anyone who purchased these decals at the higher prices can contact me and I'll transfer the difference in cost to your SAFCH account.]

PLASTIMODELLISMO DECALS. Our fellow SAFCH member, Jim Laroza (SAFCH #959) has sent some more of his excellent decals for sale through the SAFCH Sales Service. These sheets are all 12.5 cm by 17.5 cm. They are sharply printed in dense colors with perfect registration. (1) Greek Jets, 1/72 scale. Roundels, fin flashes, serial numbers, miscellaneous markings for Greek F-4E, F1C-G, A-7H, F-104G, F-5A/B, Mirage 2000, and extra roundels, fin flashes, and numbers. The serial numbers run 0-9 so you can pick your specific aircraft (except 'FG-695' for the F-104G). (2) Greek Jets, 1/48 scale. This sheet is identical with the 1/72-scale sheet with the deletion of the extra roundels, fin flashes, and serial numbers. Sheets 009 and 010 are both Luftwaffe swastika of all different kinds and sizes in black and white - solid, outlines, thick border, thin border, stenciled, round, etc.

None of these sheets have instructions, so you'll have to find your own references. This is a minor inconvenience considering the uniqueness and quality of these decals.

SQUADRONS OF THE ISRAELI AIR FORCE 1948 - 1992

Part I: Squadrons 69 to 103

John Hayles

Introduction

This article is the first of a planned series of five articles, which are intended to cover the history, markings and aircraft of all the known flying units of the Israeli Air Force, since its inception. The information is not definitive, and many gaps and uncertainties are apparent. Therefore any additions, corrections or comments readers may have are welcomed. It should be noted that this review is compiled entirely from freely available published sources.

Organization

The Israeli Defence Forces/Air Force (IDF/AF) is organized into a number of semi-autonomous wings of usually three squadrons each, together with co-located SAR and liaison flights. The wing acts as the principal flying organization at each major air base. However, the squadron remains the basic unit of administration; each having a unique identity and history.

Originating from three covertly assembled units of light aircraft in 1947, the IDF/AF today has a strength of some forty-five squadrons, located at approximately twenty-five air-bases around the country.

The Squadrons

Where the official squadron number or nickname of a unit remains unknown, a capital letter (e.g. A) has been assigned to it by the author, for identification purposes.

The squadrons will be covered in numerical order (where possible), with unidentified units described more briefly at the end of each article.

The relevant unit insignia, usually carried on the tail fin of each aircraft, are illustrated in the accompanying drawings. Rudder markings are also included where appropriate, but personal markings and uniform patches have been excluded.

69 Squadron ("Ha'patishim/The Hammers")

Role: Bomber, later Fighter-Bomber

69 squadron introduced itself with a bang on 14 July 1948, when it delivered bombs on Cairo and two other targets during the delivery flight of the three ex-USAAF B-17's which were to comprise its initial strength. Following their arrival at Ekron, the unit moved to a permanent base at Ramat David. The B-17's operated throughout the second phase of the War of Independence, carrying out some 200 missions, until the arrival of the armed truce in January 1949. It appears that only aircraft 1602 carried the well known Mickey Mouse marking on its fin. Subsequently, the aircraft mainly used in the transport role.

Two B-17's were still in service for the Suez campaign of October-November 1956, and bombed the Egyptian garrison at Sharm el Sheikh on the 4th of November. These well worn aircraft were finally retired in 1958.

The next few years are somewhat blank.

Under the command of Major Avihu Ben Nun (an ex-Mystere IVA pilot, and future IDF/AF commander), the squadron was reformed in 1969 to operate the F-4E Phantom II. 69 squadron was one of the first two units to fly the F-4E,

receiving its first aircraft in September 1969. The unit was immediately brought into action in the War of Attrition, achieving its first kill on 11th November 1969 against an Egyptian AF MiG-21 just south of Suez city.

Conflicting information is available regarding the allocation of RF-4E aircraft. Some sources indicate that the reconnaissance versions are pooled in a single unit, while others state that each F-4E unit includes a pair of RF-4E's. Photographic evidence tends to support the latter thesis, but these allocations may be regularly shuffled. It is thus assumed that 69 sqn received 1 or 2 RF-4E's from the first batch delivered between February and April 1971.

It is at present impossible to identify specific 69 sqn operations during the Yom Kippur war of 1973, but Phantom squadrons were extensively used in the air defence and SAM suppression roles, suffering considerable losses in the latter mission.

During the late 1970's, F-4E's were often engaged in strikes on PLO positions in Lebanon, cumulating in the June 1982 invasion: Operation Peace For Galilee.

All F-4's are currently being updated to Kurnass 2000 standard by IAI, with revised avionics and strengthened structure. The emphasis being on improved attack capability.

Aircraft used by 69 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
Boeing B-17G	3	14 July 48 - 1958	Ramat David	--	1601, 1602
F-4E	20	Sept 1969 - present	Ramat David	1 & 2	35, 123, 209, 269
RF-4E	2	Spring 1971 - present	Ramat David	1 & 2	

Note: Numbers in the Badge column refer to Figure numbers.

100 Squadron (No nickname)

Role: Utility Transport

One of the largest units in the IDF/AF, the origins of 100 sqn go back to the three light aircraft units formed by Shinn Aleph, the air arm of Haganah, prior to independence. The Tel Aviv, Galilee and Negev squadrons were all created on 10th November 1947, from an assorted collection of civilian (mostly ex-flying club) light aircraft, in anticipation of the declaration of the state of Israel. The aircraft operated in support of Jewish groups in Palestine, flying liaison, reconnaissance and supply sorties - while at the same time trying to avoid alerting the British authorities to their activities.

However, by April 1948, civil war had broken out between Jew and Palestinian Arab, and the squadrons were forced to take on the additional roles of air ambulance and light attack. Upon the creation of Israel, on May 14th 1948, the Shin Aleph became the Sherut Avir (Israeli Air Service) and Israel's Arab neighbors invaded, initiating the War of Independence. On 27th May 1948, the Sherut Avir became the Heyl Ha'Avir (Israeli Air Force).

Tel Aviv Squadron (1st Palmach?):

The Tel Aviv squadron was responsible for all air operation in central Israel, from its main base at Sde Dov. Aircraft used included:-

Type	Qty	Service	Base	Badge	Example Serials
DH82C Tiger Moth	2	Nov 1947 - April 1948	Sde Dov		VQ-PAU, PAV
DH89A	2	Nov 1947 - 1949	Sde Dov		VQ-PAC, PAR
RWD-13	2	Nov 1947 - Jan 1949	Sde Dov		VQ-PAL, PAM
Auster J/1 Autocrat	5	Nov 1947 - Nov 1948	Sde Dov		VQ-PAS, PAT
Beech Bonanza	1	May 1948 - Nov 1948	Sde Dov		ZS-BWS
Miles Falcon	1	May 1948 - Nov 1948	Sde Dov		
PA-18 Super Cub	6	May 1948 - Nov 1948	Sde Dov		

Galilee (Galil) Squadron (3rd Palmach):

This unit was responsible for air operations in northern Israel, centered on its main base at Yavneel (later moving to Ramat David). Some sources refer to this unit as the 'Judean' squadron. Aircraft used included:-

Type	Qty	Service	Base	Badge	Serial Examples
Auster AOP.5	18	late 1947 - Nov 1948	Yavneel		13-X
F24R Argus	1	March 48 - 4 June 48	Yavneel	3	VQ-PAM
PA-18 Super Cub	7	May 48 - Nov 1948	Ramat David		
L. Hudson	2+	late 1948 - 1950	Ramat David		
L. Lodestar	1	late 1948 - 1950	Ramat David		
G. Widgeon	2?	late 1948 - 1950	Ramat David		73-?
Mile Aerovan?	2	early 1948 - July 1948			
Republic Seabee?	1	Nov 1947 - 15 May 48		5?	61

Negev Squadron (2nd Palmach?):

This unit was responsible for air operations in southern Israel, using Beit Daras as its main base, but also operating from airstrips at Dorot, Niram and Nevatim. Aircraft used included:-

Type	Qty	Service	Base	Badge	Serial Examples
Taylorcraft C	3	March 1948 - Nov 1948	Beit Daras		VQ-PAH, PAI, PAJ
Beech-Beech Be550	1	May 1948 - Nov 1948	Dorot		
Zlin ZKII	1	May 1948 - Nov 1948	Dorot		
Short Scion	3	May 1948 - Nov 1948	Dorot		
PA-18 Super Cub	8	July 1948 - Nov 1948	Dorot		

In November 1948 100 sqn was formed by amalgamating the remnants of these three light aircraft units. 100 squadron continued its liaison and support operations until the truce in January 1949. After which, it gradually withdrew from service most of the ex-civilian types, concentrating on the Piper Super Cub. The Super Cubs again proved invaluable in the 1956 Suez campaign, flying liaison and light supply missions direct to the ground forces in the Sinai.

During the 1960's the unit gradually converted to more modern equipment in the form of the Cessna 185 and Cessna 206C Super Skywagon. The pipers were passed to the CFS for primary flying training. Due to the large size of the squadron, it is likely that the aircraft are actually grouped into a number of

flights deployed at bases around the country. Aircraft used include:-

Type	Qty	Service	Base	Badge	Serial Examples
PA-18 Super Cub	100	Nov 1948 - 1960's	Sde Dov		
Beech Bonanza	1	Nov 1948 - 1950's			
Cessna 185	2	early 60's - 1982+			004
Cessna U206C	80?	1968 - Present			15

101 Squadron ("First Fighter Squadron")

Role: Interceptor Fighter, later Fighter-Bomber

Undoubtedly the oldest and most famous IDF/AF combat unit, 101 sqn was initially formed as an offshoot of the Tel Aviv sqn described previously. Its initial equipment, Avia S-199 fighters, arrived from Czechoslovakia in crates from 20 May 1948 onwards. The aircraft were rapidly assembled at Ekron and the first flew on 29 May, going into combat the same day. With all the aircraft assembled, the squadron moved to Herzliya. Despite poor serviceability, and the appalling flying qualities of the S-199, 101 sqn pilots managed to score at least four kills in air combat.

The unit also acquired two Spitfires, a mk IX rebuilt from scrap, and a repaired Egyptian AF mk V which had been previously shot down by 101 sqn Avias. In September 1948 the unit began to re-equip with Spitfire LFIX's and Packard Merlin engined LF16's from Czechoslovakia, delivered via Ekron. A number of which were converted for photo-recce duties. At about the same time, a small number of ex-USAAF P-51D Mustangs were introduced into service and the surviving Avias passed on to form 105 sqn.

After the truce in January 1949, the unit moved to Hatzor, and in July moved again to Ramat David. In 1950, a further influx of Spitfires, this time from Italy, brought increased strength; followed by ex-Swedish P-51D Mustangs a year later. In 1953 the Spitfires were withdrawn to form 107 sqn, leaving 101 sqn as a single type unit for the first time, with the P-51D.

The squadron converted to the Mystere IVA in April 1956, quickly becoming operational, and flying from Ramat David during the Suez Campaign the following October/November. The Mysteres were principally used for flying top cover, destroying eight Arab fighters without loss in air combat - although one aircraft was lost to ground fire.

In April 1962 the squadron began to re-equip with the Mach 2 capable Mirage IIICJ after receiving pilot training in France. During the build up in tensions prior to the start of the Six Day War, the squadrons Mirages scored 7 kills in air combat without loss. At the start of the Six Day War, 101 sqn led strikes on airfields at Bir Gafaga, Cairo West and Bir Tmade in the first wave and Cairo West, Cairo International, Helwan, Bilbeis and El Minaya in the second wave. From the second day of the war, the Mirages were mainly used for air superiority missions, 101 sqn claiming some 17 kills for the loss of three aircraft. The War of Attrition, 1967 to 1973, also saw regular clashes between Mirages and Syrian and Egyptian jets. 101 sqn aircraft were temporarily deployed to bases in the Sinai in order to improve reaction times, and steadily increased their score of MiGs.

With the supply of Mirage 5J's from France embargoed, IAI-built Nesher copies began to supplement the Mirage III's in the early 1970's. Both types saw action in the Yom Kippur war of 1973, where the far greater intensity of air combat resulted in 101 sqn claiming about 48 kills for four losses.

Conversion to the locally built Kfir C-1 commenced in 1975, although 101 sqn pilots were reported to be unhappy with the performance of their new mount. The increased emphasis on air-ground operations rather than air-air performance was also considered unwelcome. Fortunately, these early aircraft were replaced by the improved Kfir C-2 model, with canard foreplanes and revised avionics, two years later. From 1983 the Kfir C-2's were remanufactured to Kfir C-7 standard with a new avionics suite, upgraded engine and additional fuselage stores stations. Some new build C-7's were also acquired to make good attrition losses.

The unit currently operates the F-16D and F-16C. Israel is unique in operating large numbers of the two-seat F-16D as a front line combat type, fitted with special weapons delivery avionics in a prominent dorsal hump. Aircraft used by 101 sqn include:-

Type	Qty	Service	Base	Badge	Example Serials
Avia S-199	26	29 May 48 - late 1948	Ekron /Herzlia	4,5,6	107,120
Spitfire V/IX	1/1	June 48 - Sept 1948	Ekron /Herzlia	4,5,6	
Spitfire IX/16	20	Sept 48 - early 1953	Herzlia /Ramat David	4,5,6	10,15,17,18
P-51D	4	Sept 48 - 1955	"	4,5,6	
P-51D	20	1951 - 1956	Hatzor /Quastina	4,5,6	41
Mystere IVA	20	April 56 - April 62	Hatzor	5,8	32,33,34,35,36
Mirage IIICJ	24	7 April 62 - April 75	Hatzor	7,8	06,52,159,341,406,542,551,854,942
Mirage IIIBJ	1	1962 - April 75	Hatzor	7,8	
IAI Mesher	6	May 1971 - April 75	Hatzor	7,8	
IAI Kfir C-1	24	14 April 75 - May 77	?	7,8	709,710,716,725,731,749,750,786
IAI Kfir C-2	24	May 1975 - 1983		7,8	853,855,877,884
IAI Kfir C-7	24	1983 - 1987		7,8	837
GD F-16D	1	1987 - Present		7,8	046
GD F-16C	124	22 Aug 1991 - present		7,8	050

103 Squadron ("The Transport Squadron")

Role: Light/Medium Transport and Multi-Engined Training

Primarily a medium transport unit, 103 sqn has also been responsible for a number of semi-autonomous flights during its history.

Its initial equipment was the famed DC-5 'Bagel Lancer', together with three C-47's which were used in the night bomber, transport and cargo roles during the War of Independence. In the early summer of 1949, with more C-47's arriving, the unit was transferred from Ramat David to Tel Nof. During 1955 the C-47's were supplemented by eight French built Nord Noratlases.

The Sinai campaign was opened on 29th October with 16 C-47's of 103 sqn para-dropping a battalion of troops at the eastern end of the Mitla pass. Subsequently, the C-47's and Noratlases operated around the clock with supply drops and evacuation of casualties in support of the fast moving ground campaign. On 2nd November both types transported troops into A-Tor for the successful attack on Sharm el Sheikh. Further Noratlases were received from Germany in 1962.

During the June 1967 Six Day War, the unit reprised its air supply role, operating in support of the army on all fronts. One Noratlas was lost, on 5th June, during the initial Sinai operations. While, on 7th June, the Noratlases flew in the main force in the action to capture Sharm el Sheikh.

At the start of the Yom Kippur War, a dozen ex-USAF C-130E's were supplied direct from the USA to supplement the C-47's and Noratlases, which again operated non-stop supply missions. Civilian Arava 101 light transports were also utilized for the duration of the war - particularly for casualty evacuation.

The Noratlases were retired in 1976, and the Arava 201/202 aircraft began to replace the long serving C-47's in the light transport/navigation trainer/multi-engined trainer roles from 1983. The units C-130E's were involved in 'Operation Solomon', the airlift of 15,000 Falasha Jews from Ethiopia to Israel on 24-25 May 1991. Aircraft used by 103 sqn include:

Type	Qty	Service	Base	Badge	Example Serials
Douglas DC-5	1	early June 48 - Oct 48	Ramat David		'Bagel Lancer'
Douglas DC-3/C-47	20+	June 48 - Oct 48 Oct 48 - mid 49 mid 49 - Oct 56 Oct 56 - 1982+ 1980's - Present	Ramat Aviv Ramat David Tel Nof Ekron Lod	9	017,032,038,4X-FAB,FNH
Nord N2501-IS	1	late 1955 - 1976	Ekron/Kfar Sirklin	10,11	4X-FAB,7AT,FAQ
Nord N2501D	120+	1962 - 1976	"	"	
BN2A Islander	8	late 1973 - 1988+	?	12	4X-FNF/004,003,006
IAI Arava 101	few	Oct 1973	?		
IAI Arava 201/202	10	1982 - Present	?		4X-FDA,FDB
C-130E Hercules	12	Oct 73 - Present	Lod	13,14	4X-FBF/301,4X-FBL/313

The semi-autonomous flights associated with 103 sqn include:

Beaufighter Flight

Role: Fighter-Bomber

Six Beaufighter aircraft were originally procured in Britain, of which only five were delivered - one having crashed before delivery. The aircraft were used in the fighter-bomber role, with an additional third crew member acting as bombardier. With very poor serviceability (one aircraft was cannibalized for spares), very few combat missions were actually flown. One example was shot down on 20th October 1948, and the type was withdrawn from service the following month and scrapped. The aircraft used were:-

Type	Qty	Service	Base	Badge	Example Serials
Beaufighter IIF	1	Oct 1948 - Nov 1948	Ramat David		
Beaufighter X(mod)	4	"	"		

Number 35 Flight

Role: Light Transport/Dive Bomber (Harvard only)

Popular and powerful, the Norseman provided virtually all of the frontline airlift capability of the Sherut Avir in the first weeks of Israel's existence. Although fitted with locally made

bomb racks, they were mostly active flying supplies and liaison missions. They were succeeded by the Harvard.

An initial batch of T-6 Harvards entered service in November 1948. The aircraft being immediately pressed into use, with camouflage and locally fitted armament, in the close support role. Attacking from a 70 degree dive proved remarkably successful, and the type was continually in action. Following the conclusion of the War of Independence, the Harvards were relegated to advanced training duties. The aircraft used were:-

Type	Qty	Service	Base	Badge	Example Serials
N. Norseman	17	May 1948 - Oct 1948	Ekron		0802
AT-6 Harvard	10	2 Nov 1948 - 1949?	Ekron		1105, 1107, 1113, 1122

Helicopter Flight

Role: Helicopter Training/Light Transport

A helicopter flight was formed in November 1956, to gather experience and develop the operational use of this new type of aircraft. After little more than a year, the flight was renamed the 'Rotor and Sword Squadron', the history of which will be described separately. The aircraft used were:-

Type	Qty	Service	Base	Badge	Example Serials
Hiller 360	1	Nov 1956 - Dec 1957	Tel Nof		
Sikorsky S-55	2	Nov 1956 - Dec 1957	"		03.
SE3130 Alouette II	1	July 1957 - Dec 1957	"		

SOME UNITS WITH UNKNOWN IDENTITIES:

'A' Sqn

Role: Observation and Liaison

This unit has operated the Do28B since 1971 for general cargo and personnel transport around the various IDF bases. The type is also used for internal anti-terrorist patrols, including one incident in which an unarmed aircraft on coastal patrol resorted to repeatedly swooping on a terrorist gang until they could be arrested by ground forces. Following this incident, consideration was given to arming the type.

The Aircraft used include:-

Type	Qty	Service	Base	Badge	Example Serials
Do28B-1	14	1971 - Present	?	15	011, 012, 024, 026, 005

'B' Sqn

Role: Attack Helicopter

A batch of Vietnam era AH-1G helicopter gunships was delivered in 1974. These were subsequently updated to AH-1Q

standard, with a nose mounted sighting system and TOW missiles for the anti-armour role. Additional helicopters to AH-1Q standard were acquired in 1982, to supplement those already in service. These helicopters have seen extensive combat use in Lebanon, both during the 1982 invasion and subsequently against various guerrilla positions.

The aircraft used include:-

Type	Qty	Service	Base	Badge	Example Serials
Bell AH-1G	6	1974 - Present	?	?	124, 126
Bell AH-1Q	18	1982 - Present			

'C' Sqn

Role: Maritime Patrol/Air-Sea Rescue

A pair of ex-US Navy PBY-5A Catalina amphibians were purchased in 1953, for reconnaissance and ASR work. The midnight blue colored aircraft were delivered unarmed and without radar. It is possible that these aircraft were attached to 103 sqn. The aircraft used were:-










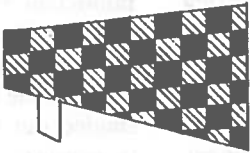

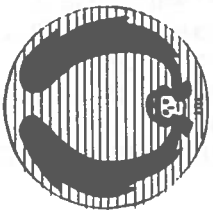
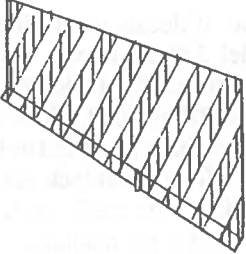

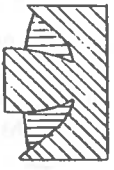
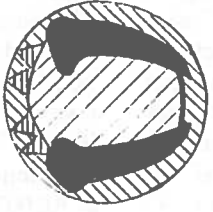
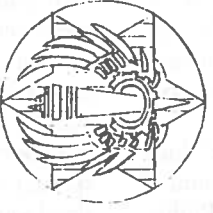

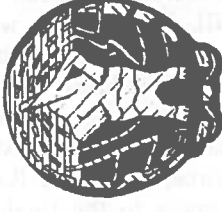

Type	Qty	Service	Base	Badge	Example Serials
PBY-5A	2	1953 - 1959	Haifa	None?	

Part II of this series will cover squadrons 105 to 110, plus several more unidentified units. The author wishes to acknowledge the assistance of Air Britain IDF/AF specialist Paul Crelin in the preparation of this series.

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4. Dassault Breguet Mirage III/5 (Mafe Huertas)
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12. Air Forces Monthly Sept 1990
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<p>SCUDRONS OF THE ISRAELI AIR FORCE 1948 - 1992 PART I: SQNS 69 TO 103 Jon Hayles</p>	<p>White</p>  <p>Black</p>  <p>Red</p>  <p>Yellow</p> 	<p>Pale Blue</p>  <p>Dark Blue</p>  <p>Light Grey</p>  <p>-</p> 	<p>Figure 1 69 Sqn (tail fin)</p>  <p>Figure 2 69 Sqn (rudder)</p>  <p>Figure 3 101 Sqn (under cockpit)</p> 	<p>Figure 7 101 Sqn (tail fin)</p>  <p>Figure 8 101 Sqn (rudder)</p>  <p>Figure 9 103 Sqn (behind cockpit)</p> 	<p>Figure 10 103 Sqn (tail fin)</p>  <p>Figure 11 103 Sqn (nose)</p>  <p>Figure 12 103 Sqn (tail fin)</p> 	<p>Figure 13 103 Sqn (tail fin- port side)</p>  <p>Figure 14 103 Sqn (tail fin- std side)</p>  <p>Figure 15 103 Sqn (tail fin)</p> 
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BUFFALO CHIPS

The last months have seen a number of items aimed at the historian and/or modeler which relate to the Brewster Buffalo, widely used by small air forces (well, okay, the RAF doesn't usually fit that definition, but it did by the end of the Singapore campaign)

Most impressive is the first volume of Chris Shores' long awaited **"Bloody Shambles"** (Grub Street Press). Volume I covers the air war in Malaya, the NEI, Burma, and the Philippines from December 1941 to mid-February 1942 (the second volume will cover the relevant remaining areas up to May 1942). The depth of research had been unparalleled in English (diehard ML-KNIL fans will also want the Boer and Casius works cited in SAFO #62). Even the pre-war "stage-setting" contains surprises - the political ramifications of the seizure of "SS Automedon" (page 28) were new to me. The book is replete with items of small-air-force interest - Toe's of the Malayan Volunteer Air Force, actions of RAAF Hudsons, Thai Air Force, and references to the (mainly New Zealander) 243 Squadron's little-known all black nightfighter Buffaloes (p. 151). Alas, no photos of the latter. This book, and its following volume, are "watershed" works; they redefine the level of scholarship in this area of study. "Highly recommended" is an understatement.

The next item is directed at modelers and comes as a complete surprise: a photo-etched brass detail set for the 1/48-scale Tamiya Buffalo, from Eduard in Czechoslovakia. This includes bas-relief landing flaps, intricate bomb racks, and lots of cockpit detail: rear cockpit (support structure, consoles, and

instrument panels (with photo-film backing card with instrument details). The only criticism I would offer is that the main instrument panels is not a good fit into the Tamiya dash coaming and it is representative of the Dutch 339C/D version. Other version differed (the RAF 339E's relocated the compass to the left floorwell, and put the bulky Mk III gunsight into the resulting space.) A correct main panel is easily fabricated from 10-thou sheet and a set of drills or a Waldron punch set. The rest of this Eduard offering is a gem.

The third item is a trio of decals from Finland, covering (guess what) Finnish Model 239 Buffaloes. In-Scale (c/o P. Manninen, Makelankatu 5B10, 00550 Helsinki, Finland) has released 1/72-scale decals AC006 and 009, which cover 1941-42 and 1943-48 respectively. Each sheet provided individual markings for at least seven aircraft (green/black serials, outlined lynxes, victory markings) and generic markings (national insignia, Finnish stenciling) for two or three machines. Also released is AC007, which repeats AC006 in 1/48 scale. The 1/72-scale sheets are \$6.00 each, the 1/48-scale sheet is \$9.00, and airmail cost \$5.00 (up to five sets) or \$8.00 (six to ten sets). The quality is very high. Modelers in 1/72 will need to do some conversion work on the Airfix kit (why do we have a 1/72-scale Treibflugel, but no Brewster 239?). 1/48-modelers can use the REMI vacuform kit or watch this space for news of domestic conversion kits to retrofit the Tamiya Buffalo.

Jim Maas (SAFCH #411), 7 Lexington Court, Clifton Park, NY 12065.

CANADIAN HADRIAN

The assault, or transport, glider was a military vehicle unique to the Second World War. Once the war was over, so was the career of the military glider. Canada was one of the few countries that continued to foresee a possible use for this weapon.

Six months after WWII ended, the Canadian military launched "operation Musk-Ox" with the purpose of testing its present equipment and operational proficiency on an Arctic battlefield. This was not a combat exercise, but a logistics one which saw the movement of hundreds of tons of supplies and equipment over a vast area north of the Tree Line and covering hundreds of miles. The idea of using transport gliders looked appealing and a small number of Waco CG-4A Hadrian gliders was borrowed from the USAAF for these trials.

In spite of the disadvantages found in the operation of these aircraft, it was still believed a glider force in this environment had merit. The two main transports in the RCAF at that time were the C-47 and the Norseman utility transport. The CG-4A could carry 70% of the C-47's load (and this being in the form of 'useful' items such as vehicles, light guns, and infantry) yet could land in the same space as the Norseman, and, utilizing 'snatch' pickups, it could be hauled out in that same space. Its use as a rescue vehicle in these conditions also looked promising although the 7-G force of a snatch pickup could prove a little wearing on the wounded.

By September of 1946, the first of 32 Wacos arrived in Canada from USAAF stocks. The majority of these were as-

signed to RCAF Stations Rivers and Gimli in Western Canada where the featureless terrain and the Arctic-like winters were ideal for training. Rivers was the home of the joint training center where cooperative exercises with all services were conducted. The Station had about a half dozen gliders for training and exercises. The remainder were stored (most in their original crates) at Gimli where a small force was also kept for training.

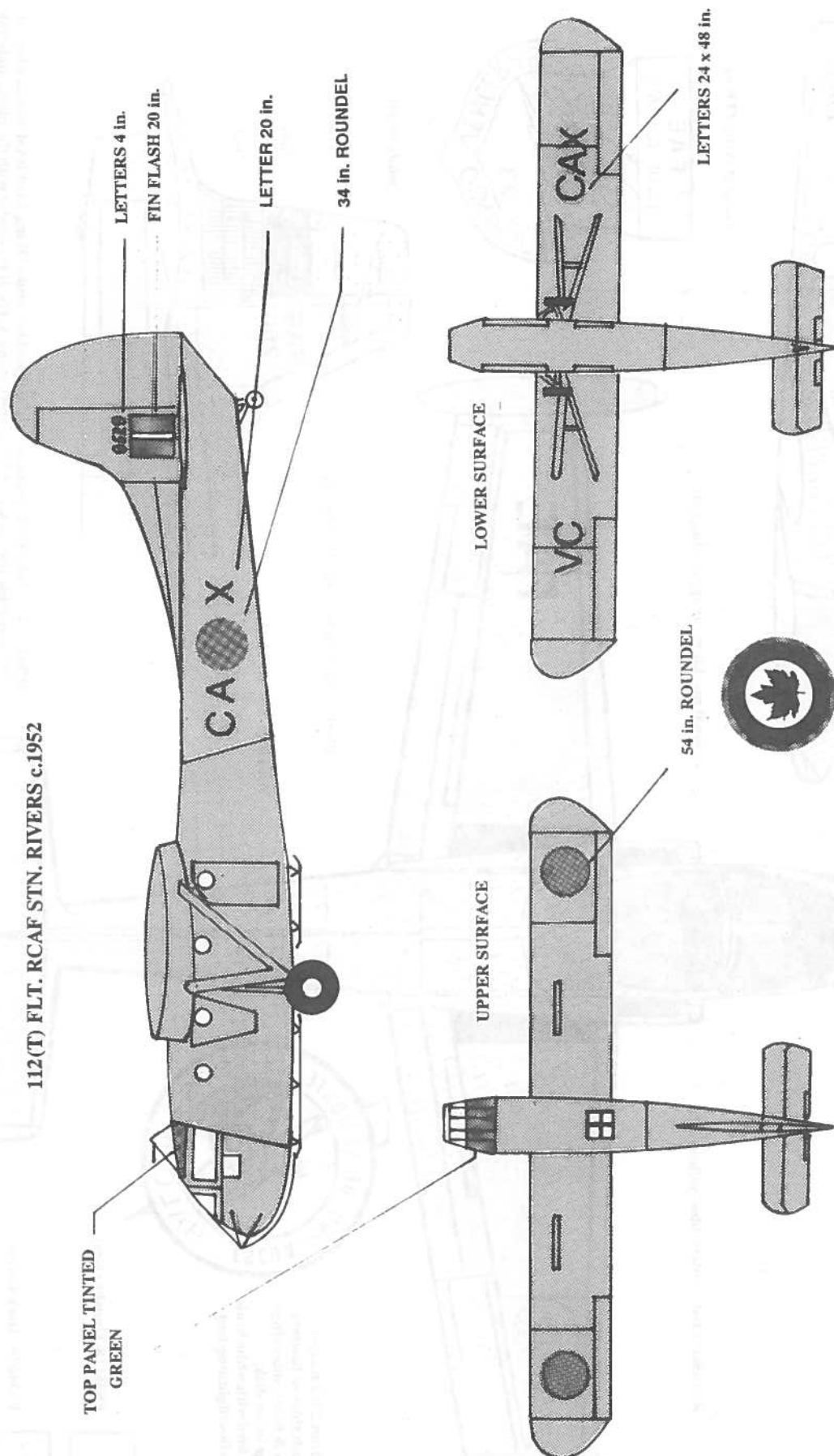
In 1949, another large scale operation, "Exercise Eagle", was staged to test Canada's Western defenses. This was a brilliant move by the military chiefs. The exercise was a disaster and politicians were pummeled by the press for the woefully inadequate equipment our armed forces had at their disposal. (Within three years of 'Eagle', the RCAF was armed to the teeth.) In the midst of the brutal assessment of the exercises one aircraft was singled out for special criticism - the Waco CG-4A. Official transcripts of the exercises related how the gliders were repeatedly 'shot down' by the defending Harvard fighters during the course of each deployment, and it scathingly described the abhorrent potential losses of men and equipment upon landing.

Surprisingly, this did not spell the end of the glider force in Canada. The Hadrian would continue in service (although in a considerably reduced role) until 1954 when they were struck off strength. Remaining gliders, most still in their crates, were sold to local farmers who made use of the wheels and crate lumber. A fitting end to an inauspicious career.

Jim Lyzun (SAFCH #920), RR #5, Thunder Bay, Ontario, Canada P7C 5M9.

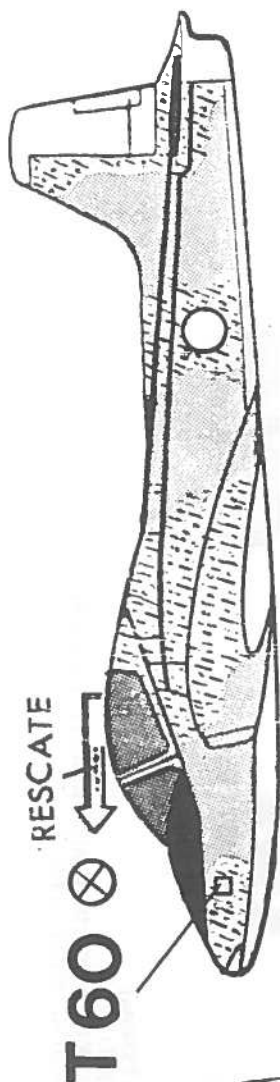
WACO CG-4A HADRIAN

112(T) FLT. RCAF STN. RIVERS c.1952



OVERALL - GREEN (FS34084)
 ALL LETTERING - YELLOW
 ROUNDELS - RED LEAF ON WHITE DISK, BLUE RING, YELLOW RING
 FIN FLASH - RED LEADING, WHITE, BLUE

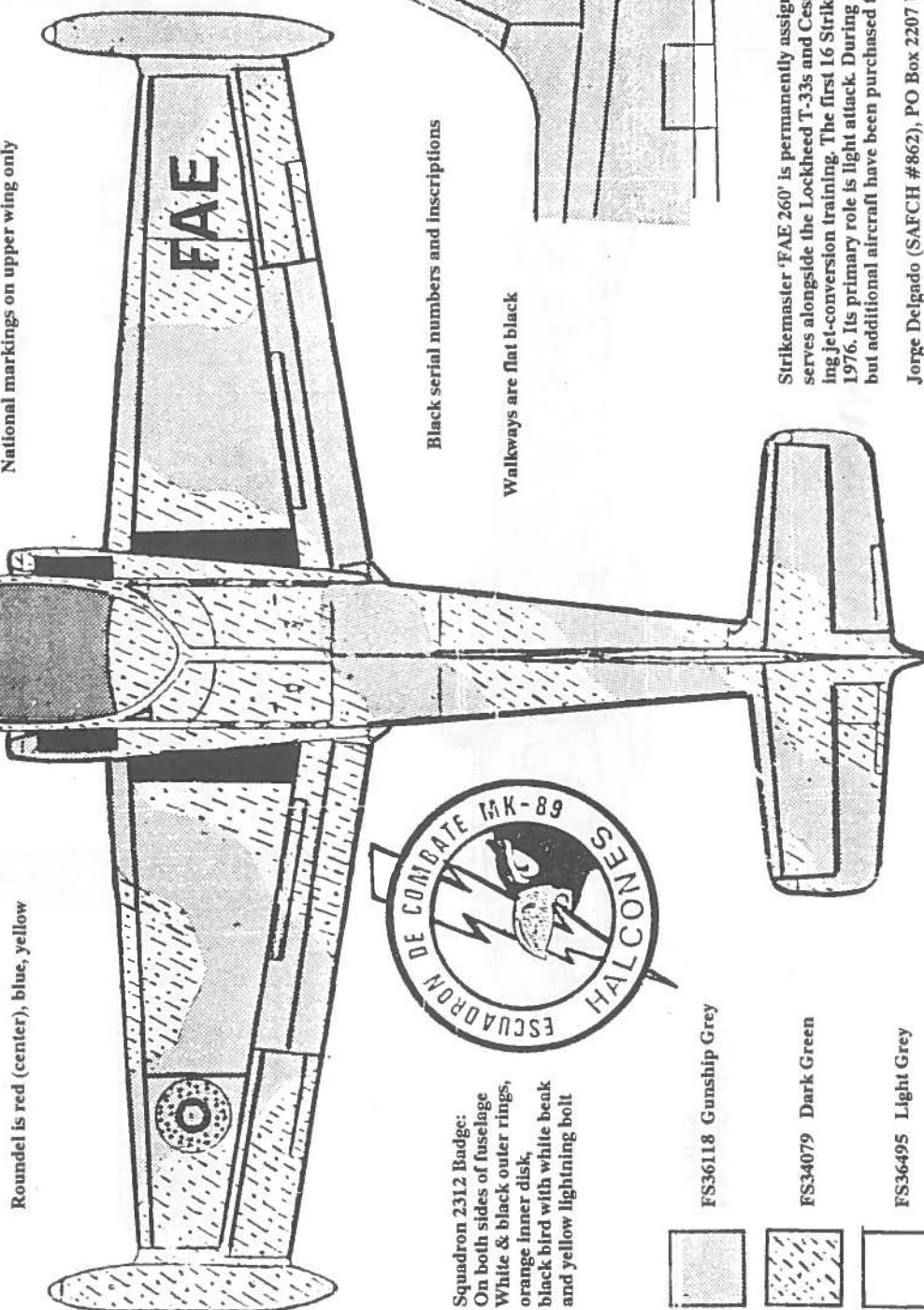
ECUADORIAN
BAE STRIKEMASTER MK 89
ALA DE COMBATE 23
BASE AEREA MILITAR ELOY ALFARO MANTA
ESCUADRON 2313



Combat Wing 23 Badge



National markings on upper wing only



Roundel is red (center), blue, yellow

white aerial

yellow

blue

red

Black serial numbers and inscriptions

Walkways are flat black

Squadron 2312 Badge:
On both sides of fuselage
White & black outer rings,
orange inner disk,
black bird with white beak
and yellow lightning bolt



FS36118 Gunship Grey

FS34079 Dark Green

FS36495 Light Grey

Strikemaster 'FAE 260' is permanently assigned to Combat Wing 23 at BAM Manta where it serves alongside the Lockheed T-33s and Cessna A-37s. It is popular with the pilots undertaking jet-conversion training. The first 16 Strikemasters arrived in Ecuador between 1972 and 1976. Its primary role is light attack. During 19 years of service, attrition has taken its toll, but additional aircraft have been purchased to keep up full squadron strength.

Jorge Delgado (SAFCH #862), PO Box 2207 Urdesa, Guayaquil, Ecuador.

THE KOPPEL REPORT

Ted Koppel

Singapore Update - Squadron Emblems: Feed-back to "Air Force Emblems of Singapore" in SAFO #55 (July 1990) has been minimal, mainly from a non-aviation source confirming that the lower right shield was indeed for the 2nd Guards Battalion (elite heli-borne unit), that most of the miscellaneous "odd" designs were unofficial, and that the RSAF ranks shown had become obsolete, perhaps in 1989. However, personal research has uncovered evidence of more of the squadron designs being used, in one form or another, on aircraft. For example, the bow-and-arrow design of 144 Sqn (page 101, second row, first emblem) has appeared, in black on a white disc, on the tail of F-5Es, both on the three-tone blue-gray camouflaged machines (such as '813', with a blue-and-black checkered nose band) or the darker-camouflaged ones (such as '801', without any band). The condor head portion of the 122 Sqn design (third row, first emblem) has appeared, without the disc background, on the tail of various C-130s (such as uncamouflaged '734' & '735', both with checkered band on fin, '733' (without band), and fully-camouflaged '720' & '731'). The yellow-and-black "phoenix" of 143 Sqn (third row, second emblem) has appeared, on its white disc, on the nose of camouflaged A-4Ss (such as '659'); and the falcon portion on the 149 Sqn design (third row, third emblem) has shown up in silhouette form (black, without disc background) on the tail of F-5Es & Fs (as on an all-silver '802' with low-visibility national insignia for the former and on a pale-camouflaged '860' in the case of the latter). It might be pointed out that magazines such as Air International and Air Forces Monthly, from which some of the above photographic samples were gleaned, show occasional inconsistencies between their captions and photographic contents. (In this case, they also offered three different spellings for the name of RSAF 149 Sqn!) Sketches showing the positioning for the aftermentioned emblems are reproduced below.

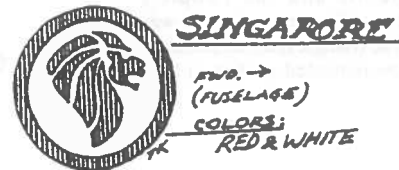
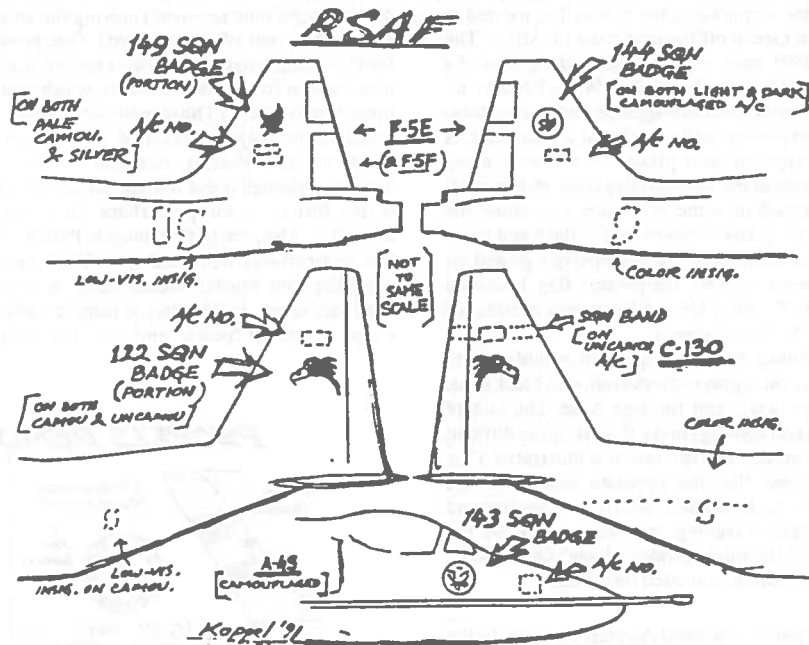
As the original SAFO article attempted to match up seven squadron names and numbers as possible clues in identifying unit emblems (without having to earn a degree in ornithology first), the following listing, compiled from a variety of sources, should help this process a bit further:

Sqn. No.	Name	Motto on Crest
111	Hawkeye	
120	Condor/Kestrel	"Strive to Achieve"
121	Gannet	
122	Condor	"Dependable"
123	Sunbird	
125	Starling	
130	Eagle	
131	Harrier	
140	Osprey	
141	Osprey/Merlin	
142	Gryphon	
143	Phoenix	"We Dare"
144	Lynx/Black Kite	"Dare to Excel"
145	Hornet	
149	Shikra	"Steadfast"
150	Falcon	

There is also a 151 Sqn, which manages the Junior Flying Club: 160, 163, 165, and 170 Sqn of Air Defence Artillery; as well as 201 and 203 Sqn, which are ground units for radar and air traffic

control. Reportedly supplied by 143 Sqn, the RSAF Aerobatic Team (five A-4S-1s) is named the "BLACK KNIGHTS" and features a black horse-head design on the fin of its red-and-white aircraft. The SAFO article showed (third row, fourth emblem) a crest with a black horse-head superimposed on a sword and castle tower. The motto reads, "Always Vigilant", the same as another crest displaying a camouflaged Skyhawk, although the first one is identified as Tengah A.B. and the second one has no unit number. As 143 Sqn has the motto "We Dare", perhaps "Always Vigilant" and the other unnumbered Skyhawk crest, "Strike Fast", belong to either 142 or 145 Sqn; or the BLACK KNIGHTS took their name/symbol from the Air Base crest, if that's what it truly is. A couple of factors to keep in mind about the above listing: (a) the multiple names shown could be the result of typographical errors on unit numbers in some publications, unit mergers or divisions, or simply name changes; and (b) there are some cases where the emblem displayed on an aircraft has little connection with the unit name. It is a considerable shame that SAFO has not one reader with enough familiarity with the RSAF to explain any or all such mysteries.

symbol of universal duality (also known as "t'aeguk" (var.sp.) on the R.O.K insignia, and appearing as well as the "Celtic boss" on Irish A.C. aircraft throughout the 1940s). In actuality, the Singapore version consisted of two stylized fish intertwined with tail trailing outward (resembling the letter "S") and an eye-dot in each half of the "disc". It undoubtedly had some ethnic significance, as descriptions of 19th century Chinese battle-flags mention, among other Buddhist symbols, a pair of fish. (Then again, the two fish, as goddesses, range from ancient Babylon to more "modern" astrology.) Whatever the origin, this second version of the RSAF insignia appeared in red and white, with or without a thing white outline. A subdued, or low-visibility, version of this appeared in the late 1980s, with black replacing the red and white being replaced by the aircraft color, whether silver or any number of camouflage colors. In at least one instance, the black position was reversed, perhaps the insignia merely being applied upside-down. While the fish may have been an appropriate symbol for this island-nation, late-1990 or early 1991 saw it replaced by an even more appropriate one, considering the true meaning of the name Singapore (Singapura = Lion City): the stylized head



Singapore Update - National Aircraft Insigne: The first version, of course, was the rather unimaginative red-white-red roundel (as always used by Peru and now also by Turkey), which was supplanted (in 1974?) by a considerably more intricate design resembling the old Chinese "yin/yang"

of a lion in a ring, still in the national colors of red and white. (One might guess that it was inspired by similar pictorial designs of its defense partners, Australia and New Zealand, which had already inspired Papua New Guinea's Paradise Bird insignia.) The new Lion Head national marking would face forward on either side of the aircraft, but does

it also face inward on the wings, or does it even appear on the wings? One assumes a subdued version would have the aircraft background color in place of the white. The main question at this point is what was the exact date of this major change-over (and what was the date of the previous change, also)?

the triangle had already been changes (in late 1970s?) to a more "standard" Arab roundel (see also SAFO #45, January 1988). Nick provided information, interpreted in the sketches herewith, on variations appearing on a MiG-21MF and a VIP-configured An-24 Coke. The transport aircraft, depicted in mid-March 1979, has an additional design with spread wings and a scroll superimposed

would have been repeated on the wings, although we have no details on the appearance of the rest of this particular aircraft.

The version on the MiG-21, based on a rather grainy photograph, does not seem to have the blue segment extending into the central black disc, although it does on the one just discussed.

So while North Yemen apparently had only one roundel design from the red-flag days of the Kingdom of Yemen to the new (combined) Yemen Republic, South Yemen had a greater variety. From the premature birth in Aden of the South Arabian Air Force in 1967, with its rather colorful and intricate insignie, came the AFSYPR (Air Force of the South Yemen People's Republic) with its blue-triangle design based on a segment of the flag, probably in December 1967. The PDRY name (with several variations in several references) was instituted in 1970, but was the "Arabic" roundel (with its variations) also introduced that early, or a bit later on the 1970s? In any case, it would seem that, design-wise at least, the merging in May 1990 was not quite as dramatic, as the main elements of a joint insignie were already in place by that time.

Ted Koppel (SAFCH #118), 3520 N. Rolling Rd., Baltimore, MD 21207-2202.

The Singapore Air Force changed its national insignia on 1 January 1991. The new insignia, which replaces the "S"-type insignia, consists of a stylized lion's head (Singapore is known as the "City of Lions") in a circle. It is carried on both sides of the fuselage. There are two color variants: red is used on uncamoouflaged aircraft, e.g. C-130, and black is used on camouflaged aircraft, e.g. F-16, F-5, A-4, & C-130. The new insignia is applied when aircraft comes in for overhaul and, therefore, both types of insignia will be seen for awhile.

"This information was published in the December 1991 issue of the Singapore military magazine, PIONEER, which also includes photos of Singapore C-130 and F-5E carrying the new insignia."

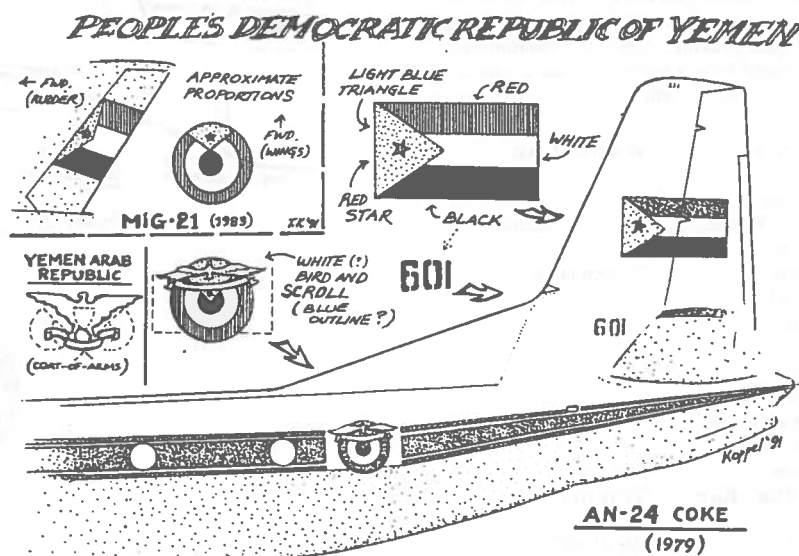
Daniel Petz (SAFCH #623), Na Ladvi 21, 182 00 Praha 8, Czechoslovakia.

Seychelles: Another island-nation, or group of islands, is the Republic of the Seychelles, located in the Indian Ocean off the east coast of Africa. The January 1991 issue of JP-4 published a photo of a Seychelles Defence Force Air Wing BN-2A; although in color, the back-lighting and dark coloration unfortunately makes it almost a silhouette. A rough interpretation is presented herewith, along with a sketch of the national flag (with stripe variation indicated in some references) to show the source of the proportions of the fin-flash and roundel colors. (Although the archipelago gained its independence in 1967, the present flag, based on that of the People's United Party, was introduced after the 1977 revolution.)

The Maritime Defender in question would seem to be in a dark blue-gray color overall, with black nose, long-range tanks, and fuselage code. The lack of contrast (and lighting) make this last quite difficult to make out; one interpretation is illustrated. One would assume that the opposite side of the fin would have the flash colors with the red leading and the dark green trailing, but what would be the positions of the wing roundels, if any? Obviously, a bit of clarification is needed on all this.

Yemen Update - National Aircraft Insignia: In the previous "Koppel Report" (SAFO #58, April 1991), referring to the merger of the nations of Yemen Arab Republic and the People's Democratic Republic of Yemen, mention was made of the PDRY blue triangle insignie. Nicholas J. Walters, III, has now reminded us that, in fact,

on the upper portion of the red-white-black roundel with light-blue segment (moving the small red star to the point of the segment). One possibility for this design might have been a special reunification mission for the two Yemens, which had been proposed for years. (The spread-winged eagle, with scroll, is the major portion of the Yemen Arab Republic coat-of-arms, not that of the P.D.R. Yemen, although it did not appear on the aircraft of the former ... except perhaps on a state/VIP aircraft?) Also, early that month PDRY forces, lead by air attacks, had invaded the YAR, capturing long-disputed border areas before a cease-fire went into effect. If that altered insignie was indeed a type of special "peace" emblem, it is unlikely it





a



b



c



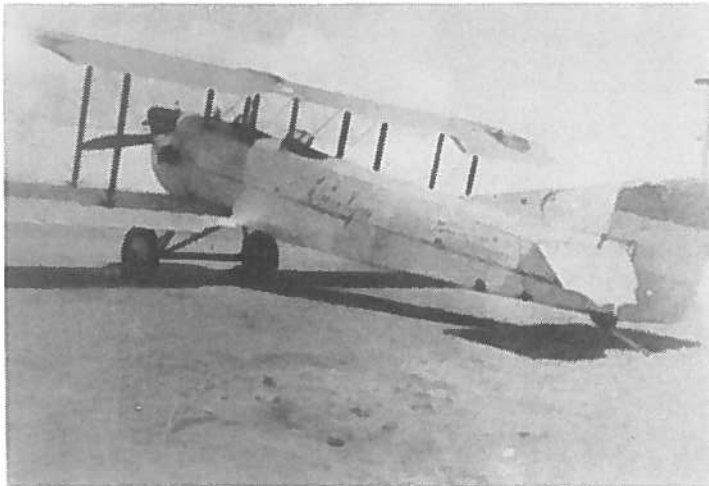
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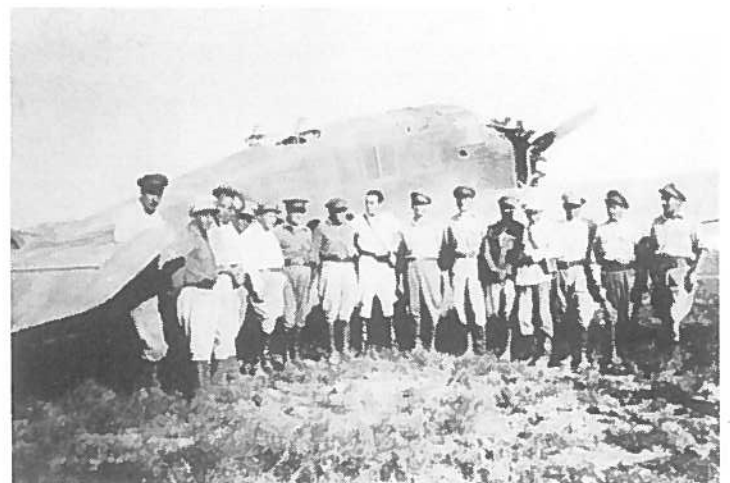
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k



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